

VOLUME 10 AIR TRANSPORTATION OVERSIGHT SYSTEM**CHAPTER 6 THE CERTIFICATION PROCESS OF PART 121 AIR CARRIERS****Section 3 Aircraft Configuration Control Document**

10-462 PURPOSE. Use this document as a guide for evaluating aircraft conformity with Title 14 of the Code of Federal Regulations (14 CFR), along with the reference Federal Aviation Administration (FAA) regulatory and advisory guidance. An air carrier may use this document to assist in developing its own aircraft conformity and acceptance programs. The regulatory and advisory guidance this document references may not be all-inclusive, and are subject to change between versions of this document. Users of this document should adequately research and review the latest regulations and advisory guidance before determining conformity.

10-463 GENERAL INFORMATION.

A. Conditions for Airworthiness. An aircraft must meet the following conditions for airworthiness:

- 1) The aircraft must conform to its type certificate (TC). An aircraft conforms to its TC and type design when the aircraft configuration and the installed components are consistent with the drawings, specifications, and other data that are part of the TC. This also includes conformity to any Supplemental Type Certificate (STC) and field-approved alterations to the aircraft.
- 2) The aircraft must be in a condition for safe operation. The condition of the aircraft relative to wear and deterioration (skin corrosion, window delaminating and crazing, fluid leaks, tire wear, etc.) must be acceptable. (Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products, current edition).
- 3) The aircraft must have a standard airworthiness certificate. This certificate remains valid as long as the aircraft:
 - a) Meets its approved type design,
 - b) Is in a condition for safe operation,
 - c) Has up-to-date maintenance and preventive maintenance, and
 - d) Alterations are performed in accordance with 14 CFR parts 21, 43, and 91.
- 4) The aircraft must conform to the “Limitations” and “Supplement” sections within the approved Aircraft Flight Manual (AFM).

B. Special Airworthiness Requirements in 14 CFR Part 121 Subpart J. Aircraft certificated under Aerobulletin 7A, part 04 of the Civil Aviation Regulations (CAR), or nontransport-category airplanes type certificated after December 31, 1964, are not listed in this document.

C. Request List to Customer. Below is a list of items the owner/operator should have available to support the aircraft and document evaluation. This list is not all-inclusive.

Figure 10–70, Request List

REQUEST LIST
Copy of airline's inspection document (conformity inspection).
A copy of Bridging (transfer) Document and Continuous Airworthiness Maintenance Program (CAMP) for the aircraft, including work cards and time limits, etc. (may be in electronic format).
The Maintenance Review Board and Maintenance Planning Document (manufacturer's recommended maintenance program) for the aircraft.
List of Passenger Accommodations (LOPA) for the interior. Additional diagrams that might include location of emergency equipment, if not on LOPA
Passenger briefing cards.
The current type certification standard equipment list.
The FAA will also ensure the operator has the aircraft in its tracking system (forecast, next check due, etc.).
Flight deck checklists.
Burn certifications for aircraft interior materials (14 CFR part 25, § 25.853).
Skin mapping (repairs) and repair assessment if applicable (part 121, § 121.370).
AFM and company manual used in lieu of AFM, if applicable (part 121, § 121.141).
Minimum equipment list (MEL).
Pilot aircraft operating manual (part 121, § 121.135).
Engineering orders accomplished.
Placard diagram and/or manual.
Records required by part 121, §§ 121.380 and 121.707.
In-flight manual (flight attendant manual) (§ 121.135).
Technical documents that firmly establish the digital flight data recorder (DFDR) parameter types and accuracies, and the latest DFDR data download, if available.
All STCs for the aircraft.

10-464 RELATED 14 CFR PARTS THAT MAY BE LISTED. Title 14 CFR parts 21, 23, 25, 33, 39, 43, 45, 91, 121; Special Federal Aviation Regulation (SFAR) 41D, and CAR 4b (e.g., B-727, DC-9).

NOTE: This document may reference certification regulations, but they will not be listed in the regulatory column.

10-465 RELATED SAFETY ATTRIBUTE INSPECTION (SAI) AND ELEMENT PERFORMANCE INSPECTION (EPI) DATA COLLECTION TOOLS (DCT) AND JOB TASK ITEMS (JTI). The majority of the inspection items within this job aid are based upon specific regulatory requirements (SRR) and are supported by the related ATOS SAI/EPI DCTs and JTIs. (i.e., elements 1.1.1 and 1.1.2).

Figure 10-71, Aircraft Information Form

A I R C R A F T	Make/Model/Series	Current Registration No.	Date of Last "Heavy" CK. (MM/DD/YY)	List of Passenger Accommodations (LOPA)
	Serial No.	Previous Registration No.	Date of Last "C" CK. (MM/DD/YY)	Yes No
	Line or Fuselage No.	Total Time (TT)	Last Operator (Designator)	Repair Assessment Available? Yes No
	Date of Manufacture	Total Cycles (TC)	Current Operator (Designator)	Bridging Document Available? Yes No
	TC Data Sheet (No.)	Interior Configuration (# of PAX)		
W G T	Operator's Empty Wgt.	Max Structural Wgt.	Max Take-Off Wgt.	Date of Last Weighing (MM/DD/YY)
	Max Zero Fuel Wgt.	Max Taxi or Ramp Wgt.	Max Landing Wgt.	Current Acft Equip List? Yes No
P O W E R P L A N T	Power Plant 1	Power Plant 2	Power Plant 3	Power Plant 4
	Make/Model/Series	Make/Model/Series	Make/Model/Series	Make/Model/Series
	Serial No.	Serial No.	Serial No.	Serial No.
	Total Time (TT)	Total Time (TT)	Total Time (TT)	Total Time (TT)
	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)
	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)
	Powerplant Type Certificate Data Sheet (No.)			

P R O P S	Propeller 1	Propeller 2	Propeller 3	Propeller 4
	Make/Model/Series	Make/Model/Series	Make/Model/Series	Make/Model/Series
	Serial No.	Serial No.	Serial No.	Serial No.
	Total Time (TT)	Total Time (TT)	Total Time (TT)	Total Time (TT)
	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)
	Propeller Type Certificate Data Sheet (No.)			
A P U	Make/Model/Series	Total Time (TT)	Time Since Overhaul (TSO)	Applicable to Acft TCDS? Yes No
	Serial No.	Total Cycles (TC)		
L D G G E A R	Nose Gear	RH Main Gear	LH Main Gear	Other Gear Assemblies
	Make/Part Number	Make/Part Number	Make/Part Number	Make/Part Number
	Serial No.	Serial No.	Serial No.	Serial Nos.
	Total Time (TT)	Total Time (TT)	Total Time (TT)	Total Time (TT)
	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)	Total Cycles (TC)
	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)	Time Since Overhaul (TSO)

Table 10–15, Conformity Related Research

ITEM	CONFORMITY RELATED RESEARCH	REFERENCE
1	Aircraft History. Review aircraft information in FAA databases and other applicable sources.	Safety Performance Analysis System, (SPAS) Integrated Safety Information Subsystem (ISIS) Foreign Civil Aviation Authority (CAA) Manufacturer, etc.
2	Airframe Type Certificate Data Sheets (TCDS). a. Compare information on the TCDS to aircraft information the air carrier provides. b. Research related information, including all TCDS notes (Instructions for Continued Airworthiness (ICA) reduced vertical separation minimums (RVSM) eligibility, High Intensity Radiated Field requirements, basic equipment list, etc.).	14 CFR part 21, § 21.21 Order 8130.2, Airworthiness Certification of Aircraft and Related Products, Chapter 8, Processing Forms, Reports, and Certification Files (as revised) TCDS
3	Engine TCDS. Review the applicability of the TCDS. Verify the compatibility of propellers to the installed engines.	Part 21, § 21.41 Part 33, § 33.1 TCDS
4	Propeller TCDS. Review the applicability of the TCDS. Verify that the propellers are approved for operation with installed engines.	§ 21.41 TCDS
5	Master Minimum Equipment List (MMEL). Obtain a copy of the current MMEL for comparison to the air carrier's MEL for correct revision.	http://www.opspecs.com
6	Airworthiness Directives (AD) (Airframe, Engines, Propellers, and Appliances). Research and generate an applicable AD listing. NOTE: It may not be possible to complete the list until after reviewing the manufacturer's and operator's appliance and equipment lists.	Airworthiness Directives
7	Additional Information. Review any other information that is available and related to the	SPAS

ITEM	CONFORMITY RELATED RESEARCH	REFERENCE
	specific aircraft being evaluated.	
8	SAI/EPI Review. Review completed design and performance assessments, as applicable, for additional information.	SAI/EPI
9	Instructions for Continued Airworthiness—(Maintenance Review Board (MRB), Maintenance Planning Document (MPD), etc.). Review ICA for additional regulatory requirements (e.g., Certification Maintenance Requirements)	

Table 10–16, Manuals

ITEM	MANUALS	REFERENCE
1	<p>Aircraft Flight Manual.</p> <p>a. Verify that the certificate holder has a current and complete (including ADs) copy of the applicable manufacturer’s FAA-approved AFM for the particular aircraft make, model, and serial number.</p> <p>b. Verify that all supplements are applicable, complete, and properly approved.</p> <p>c. Verify that the actual aircraft configuration conforms to the supplements, which includes STC-derived supplements.</p>	Part 91, § 91.9 § 121.141
2	<p>Airplane Operating Manual (AOM).</p> <p>a. If the operator elects to develop and use an AOM in lieu of the FAA-approved AFM (Item 1, above) to operate the aircraft, it must be current and complete with respect to the operator’s master AOM and the FAA-approved AFM and supplements. It must match the subject aircraft configuration and account for the interrelationships between related systems. AOM operating procedures and performance information derived from the AFM must be accurate and clearly identified as such. AFM operating and performance information modified by the operator in the AOM must be FAA-approved.</p> <p>b. Verify that the AOM is part of the</p>	§ 121.141

ITEM	MANUALS	REFERENCE
	<p>certificate holder's manual system.</p> <p>c. Verify that all AOM supplements or bulletins are appropriate and complete.</p> <p>d. If required by the operator's manual, verify that the AOM is onboard the aircraft.</p>	
3	<p>Cockpit Check Procedures (checklist). Verify that cockpit check procedures (checklists) are current and complete, properly approved, and limited to action or verification items. The operator's manual and training programs must thoroughly describe required actions and decisions for crewmembers performing a checklist.</p>	<p>Part 121, § 121.315</p> <p>Order 8900.1, Flight Standards Information Management System, (FSIMS), Volume 3, Chapter 32, Section 2, Approval and Acceptance of Manuals and Checklists</p>
4	<p>Performance Requirements. The performance requirements of this subpart, part 25, §§ 25.101 to 25.125, apply to all aircraft certificated under 14 CFR part 25, subpart A. The performance requirements of CAR 4b, subpart B, sections 4b.100 to 4b.125-1, apply to all aircraft certificated under CAR 4b. Each specific aircraft's performance and limitations for existing aircraft configuration, modifications, improvements, and engine installation, must be included in the particular FAA-approved AFM or AOM.</p>	<p>Part 121, §§ 121.173, 121.189, 121.191, 121.193, 121.195, 121.197, 121.198, 121.141; and part 121, appendix K</p>
5	<p>Minimum Equipment List. Verify that the operator's MEL is FAA-approved, conforms to the subject aircraft, and is current with respect to the MMEL.</p>	<p>Part 91, § 91.213</p> <p>Part 121, § 121.628</p> <p>8900.1, Volume 4, Chapter 4, Section 7, MEL Approval Process for 14 CFR 91K, 121, 135, and 129 Operators</p> <p>8900.1 Volume 4, Chapter 4, Section 1, MEL and CDL for Title 14 of the Code of Federal Regulations (14 CFR) Part 121, 135, and 129 Operators</p>
6	<p>Weight and Balance Manual (and Cargo Loading Manual, if applicable).</p> <p>a. Verify that certificate holder's approved weight and balance manual is appropriate to the make, model, and series of the subject</p>	<p>Part 91, § 91.605</p> <p>Part 121, § 121.135</p> <p>AC 120-27</p> <p>8900.1 Volume 3, Chapter 47, Evaluate Part 121/135 (10 or More Turbine-</p>

ITEM	MANUALS	REFERENCE
	<p>aircraft.</p> <p>b. Verify that listed weights conform to the TCDS, AFM/AOM, and the current revision of Advisory Circular (AC) 120-27, Aircraft Weight and Balance Control.</p>	Powered Aircraft) Operator's Weight and Balance Control Program
7	<p>Flight Attendant Manual. If the type of aircraft requires flight attendants per part 121, § 121.391, verify that the operator has a current, complete, and FAA-accepted manual available. Ensure that the manual accurately depicts the cabin configuration and equipment.</p>	<p>Part 121, §§ 121.135, 121.139, 121.391</p> <p>8900.1, Volume 3, Chapter 32, Section 13, Approval and Acceptance of Flight Attendant Manuals and Checklists</p>
8	<p>Other Manual Parts by Regulation.</p> <p>a. Verify that all manual parts required by the operator's manual to be carried onboard the aircraft, are in fact onboard.</p> <p>b. Verify that the manual is current, FAA-approved or accepted (as appropriate), and accurately reflects the aircraft configuration.</p>	<p>Part 121, §§ 121.133, 121.135, 121.139, 121.369</p> <p>8900.1, Volume 3, Chapter 32, Section 11, Evaluate a Maintenance Company Manual/Revision for a 14 CFR Part 121 or a 14 CFR Section 135.411(a)(2) Program</p>

Table 10–17, Records

ITEM	RECORDS	REFERENCE
1	<p>Export Certificate of Airworthiness (C of A).</p> <p>a. Does the aircraft have a properly issued U.S. Certificate of Airworthiness?</p> <p>b. Check the applicability of exemptions/deviations from the TCDS or other certification document.</p> <p>c. For foreign-registered aircraft, does the C of A issued by the foreign CAA, meet the regulatory requirements for U.S. Air Carrier service? (Refer to part 121, § 121.153c.)</p>	<p>Part 121, § 121.153</p> <p>8900.1 Volume 3, Chapter 31, Section 5, Evaluate Part 121, 135.411(a)(2) Air Carrier's Maintenance Recordkeeping System</p> <p>8900.1 Volume 3, Chapter 17, Evaluate Foreign-Registered Aircraft Operated by 14 CFR Part 121/135.411(a)(2) Operators Order 8130.2</p>
2	<p>Maintenance Overhaul/Time Controlled/Life-Limited Items/Certification Maintenance Requirements/Airworthiness Limitations.</p> <p>a. Review documentation for all articles subject to time/cycle/life limits.</p>	<p>Part 121, §§ 121.368, 121.380</p> <p>8900.1 Volume 6, Chapter 2, Section 28, Monitor Continuous Airworthiness Maintenance Program/Revision</p> <p>8900.1 Volume 3, Chapter 31, Section 5</p>

ITEM	RECORDS	REFERENCE
	<p>Are the articles tracked by nomenclature, part number, serial number, lot number, or via records the operator retains?</p> <p>b. Review the TCDS for specific tracking requirements.</p> <p>c. Does the operator have a system to verify inspection status, overhauls, and repetitive maintenance/inspection tasks for this specific aircraft?</p> <p>d. Are the requirements of the applicable MRB evident in the operators program? Have all MRB requirements been met? (Refer to Table 10-15, Conformity Related Research for a description.)</p> <p>e. Are the records and inspection intervals in accordance with the air carrier's authorized CAMP?</p> <p>f. Perform a sampling inspection of articles/components installed on the aircraft.</p> <p>Are the articles/components maintained in accordance with the air carrier's authorized CAMP?</p> <p>Refer to Table 10-15, Item 9, Manufacturer's ICA (MPD, OAMP, etc.). Refer to the applicable TCDS in Table 10-15.</p>	<p>FAA Order 8110.54, Instructions for Continued Airworthiness Responsibilities, Requirements, and Contents</p> <p>AC 20-62D, Eligibility, Quality, and Identification of Aeronautical Replacement Parts</p> <p>AC 20-114, Manufacturers' Service Documents</p>
3	<p>Air Traffic Control (ATC) Transponder Test and Inspection.</p> <p>a. Do the operator's records document the completion of the 24-month tests and inspection of the ATC transponder system (including altitude reporting equipment) in accordance with part 43, appendix F?</p> <p>b. Do the records support proper transponder reporting of the current aircraft Mode "S" address?</p>	<p>Part 43, appendix F</p> <p>Part 91, § 91.413</p> <p>Part 121, § 121.345</p>
4	<p>Repair Assessment and Survey of Pressurized Fuselages (Damage Tolerance-Based Inspections and Procedures). Check the aircraft records to ensure that inspections, repairs, and alterations made to the pressure</p>	<p>Part 43, appendix A</p> <p>Part 121, § 121.1107</p> <p>8900.1 Volume 6, Chapter 11, Section 14, Conducting Records Reviews and Aircraft</p>

ITEM	RECORDS	REFERENCE
	vessel of the aircraft conform to the air carrier's program and regulatory requirements.	<p>Inspections Mandated by the Aging Airplane Rules for Parts 121, 129 and 135</p> <p>8900.1 Volume 6, Chapter 2, Section 28</p> <p>FAA Order 8100.9A, DAS, DOA, and SFAR 36 Authorization Procedures</p> <p>FAA Order 8300.13, Repair Assessment Program</p> <p>AC 25.571-1C, Damage Tolerance and Fatigue Evaluation of Structure</p> <p>AC 91-56, Continuing Structural Integrity Program for Airplanes, (as revised)</p> <p>Policy Statement (PS)-ANM100-1989-00048, Policy Regarding Impact of Modifications and Repairs on the Damage Tolerance Characteristics of Transport Category Airplanes</p> <p>PS-ANM100-1988-00040, FAA Policy With Respect to Damage Tolerance of Engine Mounts</p> <p>PS-ANM100-1986-00055, Structural Integrity Limits in Primary Aircraft Structure</p> <p>PS-ANM100-1993-00047, Policy Regard Fail-Safe Features of Structures Designed to the Damage Tolerance Requirements of § 25.571</p>
5	<p>Temporary Repairs.</p> <p>a. Check the records of temporary repairs made to the aircraft for compliance with program and regulatory requirements.</p> <p>b. Perform a spot check of the aircraft for evidence of repairs and correlate those repairs to supporting documentation.</p>	<p>Part 43, § 43.13</p> <p>8900.1 Volume 3, Chapter 36, Review 14 CFR Part 121/135.411(A)(2) Engineering Change Authorization</p> <p>Order 8300.13</p> <p>AC 25-22, Certification of Transport Airplane Mechanical Systems</p> <p>AC 120-73, Damage Tolerance Assessment of Repairs to Pressurized Fuselages</p>

ITEM	RECORDS	REFERENCE
6	<p>Supplemental Type Certificates.</p> <p>a. Check that FAA-approved data support the installed STCs.</p> <p>b. Check that the installations are not partial applications of the STC.</p> <p>c. Conform the installations to the data and ensure that the required changes to the operating manuals (AFM supplements) and maintenance manuals address the change.</p> <p>d. Review the ICA provided with the STC and ensure these requirements have been addressed in the operator's maintenance/inspection program and publications.</p> <p>e. Check STCs installed on the aircraft. Check for evidence that the interrelationship of the installations was reviewed and determined to be acceptable (STC requirement).</p>	<p>Part 121, §§ 121.367, 121.379, 121.380, 121.707</p> <p>Part 91, § 91.403(d)</p> <p>8900.1 Volume 6, Chapter 11, Section 2, Conduct a Detailed Process/Task Inspection</p> <p>8900.1 Volume 3, Chapter 36</p> <p>8900.1 Volume 4, Chapter 3, Section 1, Airplane Performance Computation Rules</p> <p>8900.1 Volume 4, Chapter 3, Section 3, Approval of Performance Data Sections of CFMs</p> <p>FAA Order 8110.21, Supplemental Type Certificate (STC) Approvals, "One Aircraft Only"</p> <p>FAA Order 8110.37, Designated Engineering Representative Handbook (as revised)</p> <p>FAA Order 8110.49, Software Approval Guides</p> <p>Order 8110.54</p> <p>Order 8130.2, as revised</p> <p>AC 33.4-1, Instructions for Continued Airworthiness</p> <p>AC 20-41A, Substitute Technical Standard Order (TSO) Aircraft Equipment</p> <p>AC 25.571-1C</p> <p>AC 43-210, Standardized Procedures for Requesting Approval of Data, Major Alterations, and Repairs</p> <p>AC 120-73</p>
7	<p>Airworthiness Directives.</p> <p>a. Check that the operator has a method to track the current status of all applicable ADs. The records must conform to the requirements of the certificate holder's manual. The information must be specific enough to identify each AD by the:</p>	<p>§ 91.403</p> <p>§ 121.380</p> <p>AMOC guidance: http://www.faa.gov/aircraft/air_cert/continued_operation/ad/alt_moc/</p>

ITEM	RECORDS	REFERENCE
	<p>1) Date accomplished.</p> <p>2) Method of accomplishment.</p> <p>3) One time or recurring.</p> <p>4) Time/Date of the next required action.</p> <p>b. Do Alternative Methods of Compliance (AMOC) satisfy an AD requirement? (if applicable)</p> <p>1) Do documentation exist approving the AMOC, and do they allow the specific certificate holder to use that AMOC as a basis for compliance as specified within its text?</p> <p>2) Spot check of one-time, and recurring ADs (airframe, engine, propeller, and appliance).</p> <p>3) Does the operator have a system to track and report AD status and compliance?</p>	
8	<p>Major Repairs and Alterations.</p> <p>a. Review records for current major repairs and alterations for each airframe, engine, propeller (if applicable), and appliance.</p> <p>b. Is there documentation for each major repair and alteration, and was it accomplished in accordance with technical data approved by the FAA? (e.g., STC, SRM, DER, SFAR 36, FAA field approval, etc).</p> <p>c. Are there ICAs for each alteration and/or repair included in the certificate holder's maintenance and inspection program?</p>	<p>Part 25, § 25.1529</p> <p>Part 25, appendix H</p> <p>Part 43, § 43.9</p> <p>Part 43, appendix A</p> <p>Part 43, appendix B</p> <p>Part 121, §§ 121.379, 121.380 121.707, 121.709</p> <p>AC 120-77, Maintenance and Alteration Data</p> <p>8900.1 Volume 6, Chapter 11, Section 2</p>
9	<p>Digital Flight Data Recorder System (DFDRS) or Flight Data Recorder System (FDRS), as applicable.</p> <p>a. Does the certificate holder maintain the correlation data required by the applicable part 121 section?</p> <p>b. Review DFDRS or FDRS download/analysis records required by the certificate holder's manual.</p> <p>c. Check the recorder system for all</p>	<p>Part 121, §§ 121.343, 121.344, 121.344a</p> <p>8900.1 Volume 4, Chapter 14, Section 8, Monitor Flight Data Recorders</p> <p>Part 121, appendix B1</p> <p>Part 121, appendix B2</p> <p>Part 121, appendix M</p>

ITEM	RECORDS	REFERENCE
	<p>required parameters.</p> <p>d. Is there a system for the analysis download and documenting discrepancies? Are those discrepancies corrected per the certificate holder's manual?</p>	
10	<p>Certification Maintenance Requirements (CMR). Verify that all CMR tasks were properly incorporated into the operator's programs.</p> <p>Methods and time intervals associated with these tasks must be FAA-approved (Aircraft Certification Office (ACO) or certificate-holding district office (CHDO), as applicable) in the certificate holder's operations specifications (OpSpecs). CMRs may be located in the applicable Maintenance Review Board Report (MRBR).</p>	<p>Part 23, § 23.1529</p> <p>§ 25.1529</p> <p>Part 119, § 119.49</p> <p>Part 121, § 121.367</p> <p>8900.1 Volume 3, Chapter 37, Evaluate a Part 121/135.411(a)(2) Certificate Holder's Short Term Escalation Procedures</p> <p>8900.1 Volume 3, Chapter 40, Approve a Maintenance Reliability Program for 121/135</p> <p>8900.1 Volume 6, Chapter 2, Section 37, Monitor Maintenance Aspects of Part 121 Extended-Range Operations With Two-Engine Aircraft (ETOPS)</p> <p>8900.1 Volume 6, Chapter 2, Section 38, Evaluate a Part 121/135.411(a)(2) Operator Aircraft Storage Program</p>
11	<p>Operating Noise Limits.</p> <p>a. Does the aircraft comply with 14 CFR part 36, Stage III requirements?</p> <p>b. Identify level of compliance with airframe and engine noise suppression requirements.</p> <p>Document the manufacturer service bulletins, STCs, etc.</p>	<p>§ 23.1529</p> <p>§ 25.1529</p> <p>§ 119.49</p> <p>§ 121.367</p> <p>8900.1 Volume 3, Chapter 37</p> <p>8900.1 Volume 3, Chapter 40</p> <p>8900.1 Volume 6, Chapter 2, Section 37</p> <p>8900.1 Volume 6, Chapter 2, Section 38</p>

Table 10–18, Inspection Program and Programs Covering Other Maintenance, Preventive Maintenance, and Alterations

ITEM	INSPECTION PROGRAM AND PROGRAMS COVERING OTHER MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS	REFERENCE
1	<p>Inspection Program and Programs Covering Other Maintenance, Preventive Maintenance, and Alterations.</p> <p>a. Verify that the aircraft is included in and maintained in accordance with the operator's maintenance program and time limitations.</p> <p>b. If the aircraft was previously operated, verify proper transition (bridging) of the previously accumulated times to the current operator's (manufacturer's recommended baseline) program.</p> <p>c. Verify proper incorporation of ICAs for any systems or equipment added to the aircraft since manufacture.</p> <p>Airplane Conformity Process. Verify that the certificate holder has an aircraft conformity or similar process documented within its manual system. Before being added to OpSpecs, ensure that the process results in aircraft that meet all applicable requirements of 14 CFR; the certificate holder's inspection program; and programs covering other maintenance, preventive maintenance, and alterations.</p>	<p>§ 119.49</p> <p>§ 121.367</p> <p>8900.1 Volume 6, Chapter 2, Section 28</p> <p>AC 120-16, Air Carrier Maintenance Programs, as revised</p>
2	<p>VHF Omnidirectional Radio Range (VOR) Equipment Checks for Instrument Flight Rules (IFR) Operations. Verify that the aircraft is included in the operator's program. Ensure that the VOR equipment of the aircraft is being maintained, checked, and inspected under an approved procedure, or has been operationally checked within the preceding 30 days and was found to be within the limits of the indicated permissible bearing error set forth in part 91, § 91.171. Also see related Item 4 under Table 10-17, Records.</p>	<p>§ 91.171</p> <p>§ 121.367</p> <p>8900.1 Volume 6, Chapter 2, Section 28</p>

ITEM	INSPECTION PROGRAM AND PROGRAMS COVERING OTHER MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS	REFERENCE
3	High-Intensity Radiated Field (HIRF)/Lightning Protection Maintenance Program. Verify the aircraft is included and maintained in accordance with the certificate holder's HIRF maintenance and inspection programs. Refer to MRBR, STC.	§ 121.367 8900.1 Volume 6, Chapter 2, Section 28 AC 20-53, Protection of Aircraft Fuel Systems Against Vapor Ignition Caused by Lightning AC 20-136, Protection of Aircraft Electrical/Electronic Systems Against the Indirect Effects of Lightning AC 20-158, The Certification of Aircraft Electrical and Electronic Systems for Operation in the High-Intensity Radiated Fields (HIRF) Environment
4	ATC Transponder Tests and Inspections. Verify that the aircraft has been included and maintained in accordance with the certificate holder's program and that the program included 24-month tests and inspections of the ATC transponder systems in accordance with part 43, appendix F. Tests and inspections should include altitude reporting equipment.	Part 43, appendix F Part 91, § 91.413 § 121.367 AC 20-131, Airworthiness Approval of Traffic Alert and Collision Avoidance Systems (TCAS II) and Mode S Transponders
5	Anticollision Strobe Lights. Verify that the aircraft anticollision lights have had the periodic inspection tasks and/or hard time replacements accomplished in accordance with the air carrier's maintenance program.	Part 121, §§ 121.323, 121.367 AC 20-74, Aircraft Position and Anticollision Light Measures
6	Reduced Vertical Separation Minimums (RVSM). If authorized to conduct RVSM operations, verify that the aircraft conforms to its RVSM configuration data package and that the aircraft is being maintained in accordance with the certificate holder's approved program. Refer to: OpSpecs D092 in 8900.1 Volume 12, Chapter 2, Section 6, Part 129 Part D Operations—Aircraft Maintenance; related STC, and service bulletins.	Part 91, §§ 91.703, 91.706, 91.180 Part 91, appendix G, §§ 91.2, 91.3

ITEM	INSPECTION PROGRAM AND PROGRAMS COVERING OTHER MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS	REFERENCE
7	Flight Data Recorder System. Verify that, as a minimum, the certificate holder's maintenance program meets the requirements of AC 20-141, Airworthiness and Operational Approval of Digital Flight Data Recorder Systems, and 8900.1 Volume 4, Chapter 14, Section 8.	§ 121.367 AC 20-141 8900.1 Volume 4, Chapter 14, Section 8
8	Underwater Locator Beacons (ULB). Verify that operational and battery capacity tests of each ULB were performed before battery replacement or overhaul has been accomplished in accordance with the air carrier's CAMP.	§§ 121.343, 121.359 §§ 23.1457, 23.1459 §§ 25.1457, 25.1459 8900.1 Volume 4, Chapter 14, Section 8
9	Corrosion Prevention Control Program (CPCP). a. Verify that the aircraft is included and maintained in accordance with the certificate holder's Corrosion Prevention Control Program required per the applicable AD and/or MRBR. b. Verify reporting activity. c. Verify that the Aging Aircraft/Corrosion Control Program provides the necessary guidance to evaluate and respond in a timely manner to structural fatigue and corrosion.	§ 121.367 8900.1 Volume 6, Chapter 2, Section 28 Order 8300.12, Corrosion Prevention and Control Programs
10	Structural Inspection Requirements. Verify that the aircraft is included and maintained in accordance with the operators structural inspection program. Refer to MRB and/or ADs, as applicable. Damage Tolerance Rating (DTR) Evaluations. Verify the aircraft has been included in the DTR evaluation program and is maintained in accordance with the certificate holder's inspection program and program covering other maintenance, as applicable. Refer to MRB and/or ADs, as applicable.	§ 121.367 8900.1 Volume 6, Chapter 2, Section 28 AC 25.571-1C AC 120-73

ITEM	INSPECTION PROGRAM AND PROGRAMS COVERING OTHER MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS	REFERENCE
11	Engines, Auxiliary Power Unit (APU). Ensure the engines and APU have been included and maintained in accordance with the operator's current maintenance and inspection programs. Refer to MRB and/or ADs (as applicable).	§ 121.367 AC 120-16 8900.1 Volume 6, Chapter 2, Section 28
12	Lower Landing Minimums. If authorized to conduct CAT II/III operations, verify that the aircraft conforms to, and is maintained in accordance with, the certificate holder's approved program. (Refer to OpSpecs C059 and C060.)	Part 91, § 91.189 Part 119, §§ 119.43, 119.49 §§ 121.367, 121.369, 121.567 8900.1 Volume 4, Chapter 2, Section 11, Maintenance/Inspection Programs for Low Approach Landing Minimums 8900.1 Volume 3, Chapter 18, Section 5, Part C Operations Specifications—Airplane Terminal Instrument Procedures and Airport Authorizations and Limitations AC 120-29 AC 120-28
13	Electrical Wiring Interconnection Systems (EWIS) Maintenance Program. Verify that the operator has a EWIS maintenance program. Text below is excerpted from part 121, § 121.1111(b). “After March 10, 2011, no certificate holder may operate an airplane identified in paragraph (a) of this section unless the maintenance program for that airplane includes inspections and procedures for electrical wiring interconnection system (EWIS).” Submit revisions to the principal inspector for review and approval. Once the program is incorporated, ensure required inspections have been accomplished.	§ 121.1111
14	Fuel Tank System Maintenance Program. Verify that the aircraft has been included and	§ 121.1113

ITEM	INSPECTION PROGRAM AND PROGRAMS COVERING OTHER MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS	REFERENCE
	<p>maintained in accordance with the operator's fuel tank maintenance program. Text below is excerpted from part 121, § 121.1113(b) and (c).</p> <p>“For each airplane on which an auxiliary fuel tank is installed under a field approval, before June 16, 2008, the certificate holder must submit to the FAA Oversight Office proposed maintenance instructions for the tank that meet the requirements of Special Federal Aviation Regulation No. 88 of this chapter.”</p> <p>“After December 16, 2008, no certificate holder may operate an airplane identified in paragraph (a) of this section unless the maintenance program for that airplane has been revised to include applicable inspections, procedures, and limitations for fuel tanks systems.”</p> <p>Once the program is incorporated, ensure inspections required have been accomplished.</p>	SFAR 88, Fuel Tank System Fault Tolerance Evaluation Requirements

Table 10–19, Fuselage, Exterior, Engines, and Propellers

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
	<p>General Visual Inspection. This inspection is a visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light. This inspection may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to access the area being checked. Use normal inspection aids as required, such as inspection mirrors, etc.</p>	<p>Title 49 of the United States Code (49 U.S.C.) § 44713</p> <p>8900.1 Volume 6, Chapter 2, Section 4, Ramp Inspections for Part 91 Subpart K Operators and Part 121 and 135 Air Carriers</p>

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
1	<p>Radome Area.</p> <p>a. Inspect radome, erosion cap, and lightning diverter strips for condition and security.</p> <p>b. If the radome internal area is accessible, do the following:</p> <p>1) Inspect exposed electronic/electrical components for condition, security, and proper bonding/grounding (antennas, weather radar wave-guide, cable and wire bundles and connectors).</p> <p>2) Inspect the exposed airframe area (forward-pressure bulkhead) for condition, corrosion, damage and repairs. When repairs are noted, including the radome, check the repair data at the certificate holder's record section for FAA-approved or -accepted data.</p>	Part 121, §§ 121.135, 121.369
2	<p>Pitot Air Probes.</p> <p>a. Inspect for proper installation, condition, and type. Probes must have a heat function (or equivalent means for preventing malfunctioning due to icing). Ports must be free of obstructions.</p> <p>b. Visually inspect the critical surface areas around the probes for any irregularity that could impair the effectiveness of the probes. If repairs are noted check the repair data at the certificate holder's record section for FAA-approved data.</p>	Part 121, §§ 121.323, 121.325, 121.341
3	<p>Static Pressure Ports.</p> <p>a. Check ports for condition. Check that all openings are free of obstructions.</p> <p>b. Visually inspect the critical surface areas around the probes for any irregularity that could impair the effectiveness of the ports.</p> <p>c. If repairs are noted, check the repair data at the certificate holder's record section for FAA-approved data.</p>	Part 121, §§ 121.313, 121.341 AC 120-73

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
4	<p>External Lights. Inspect the proper installation, condition, and weather sealing of all external lights and light lenses. Check the operation of the following:</p> <ul style="list-style-type: none"> a. Anticollision lights, fuselage. b. Wing tip and tail white-gas discharge lights (strobe lights). c. Exterior emergency lights (if installed). d. Landing lights. e. Taxi lights. f. Position lights. g. Wing icing detection lights. h. If high-intensity (strobe) lights are used, verify at the operator's record repository for the latest luminosity check. i. Wheel well lights (if installed). 	<p>§§ 121.323, 121.341</p> <p>AC 20-30, Aircraft Position Light and Anticollision Lights Installation</p> <p>AC 20-74</p> <p>AC 43.13-2, Acceptable Methods, Techniques, and Practices—Aircraft Alterations</p>
5	<p>Antennas. Inspect for proper installation and condition, such as leading edge erosion and cracking of the composite covering. Pay particular attention to possible corrosion under antenna bases.</p>	<p>§§ 121.345, 121.367</p>
6	<p>Miscellaneous Fuselage Sensors (e.g., ice detection, total air temperature, vibration). Inspect sensors for condition, security, and corrosion on fuselage skin.</p>	<p>§ 121.367</p>
7	<p>Static Dischargers.</p> <ul style="list-style-type: none"> a. Inspect for proper condition and security, and for the proper discharger types, quantities, and locations. Consult the appropriate aircraft documentation for the proper type. b. Check for corrosion under the attachments. <p>NOTE: See MMEL and Configuration Deviation List for minimum required.</p>	<p>§ 121.367</p>

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
8	<p>Aircraft Inspection (with doors, compartment doors, service panels opened; flaps and slats down).</p> <p>a. Inspect the aircraft exterior for general condition, damage, corrosion, fluid leaks, etc. Check fuel drains, fuel vents, fuel filler caps, and under-wing fuel filler hard point.</p> <p>b. Check the security of attachment of control surfaces, and corrosion-prevention treatment application.</p> <p>c. Check wing and tail leading edges for dents and erosion.</p> <p>d. Check heating pads on top of wing surfaces above inboard fuel tanks for condition and operation, if installed.</p> <p>e. Examine joints, seams, and skin for wrinkles, bulges, fasteners, skin erosion, corrosion, and oxidation.</p> <p>f. When dents are noted, verify at the operator's record repository and or the aircraft maintenance log that a limit check has been performed and noted.</p> <p>g. Check composite material panels for moisture contamination and bonding, delaminating, or separation of skin-bonding.</p> <p>h. Check windshield wipers for condition, security, and operation.</p> <p>i. Compare repair mapping with aircraft. Pay attention to critical areas.</p> <p>j. If repairs are noted check the repair data at the certificate holder's record repository for FAA-approved data.</p>	<p>AC 20-116, Marking Aircraft Fuel Filler Openings With Color Coded Decals</p> <p>AC 43-204, Visual Inspection for Aircraft</p>
9	<p>Aircraft Painting.</p> <p>a. Check for condition, flaking, and evidence of corrosion at seams and fasteners; and for filliform corrosion under painted surfaces.</p> <p>b. Verify at the operator's record</p>	<p>AC 120-27, Aircraft Weight and Balance Control, as revised</p>

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
	repository that accepted materials and procedures were followed, including the balancing of flight control surfaces.	
10	Identification of Aircraft. Verify that a fireproof identification plate or other approved marking is attached to the aircraft with all pertinent data as required by, and in accordance with, applicable Federal aviation regulations.	Part 45, §§ 45.11, 45.13 AC 43-17, Methods, Techniques, and Practices Acceptable to the Administrator Governing the Installation, Removal, or Change of Identification Data and Identification Plates
11	Name of Certificate Holder. Verify that the aircraft legibly displays the business name or certificate number appearing on the aircraft certificate holder's OpSpecs. Ensure the display is clearly visible and readable to a person standing on the ground at any time except during flight.	Part 119, § 119.9
12	Placards, Markings, Exterior Exit Markings. a. Check that all placards are properly installed at the location specified by the FAA-approved AFM, aircraft type certification basis, applicable operating rules, and the operator's manual. b. Check that all placards and or markings are not easily erased, disfigured, or obscured. Check that each passenger emergency exit is marked on the outside of the aircraft by a 2-inch contrasting colored band. c. Check that instructions for the means of opening those exits from the outside are marked on the outside of each passenger emergency exit. d. If the emergency exit is located only on one side of the fuselage, check that it has a conspicuous marking on the other side.	Part 121, § 121.310 AC 20-88A, Guidelines on the Marking of Aircraft Powerplant Instruments (Displays)
13	Exterior Escape Route. a. Check that the surface of each emergency escape route is made of slip-resistant material.	§ 121.310

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
	<p>b. Check general condition of emergency slip-resistant escape route.</p>	
14	<p>Windows.</p> <p>a. For passenger compartment windows, inspect for general condition and security, visibility, scratches, crazing, and condensation.</p> <p>b. For flight-deck windshield, side windows, direct-view windows, or operable sliding windows, check for condition and delaminating.</p> <p>c. Check condition of windshield wipers.</p>	<p>§ 121.313</p> <p>AC 25.775-1, Windows and Windshields</p>
15	<p>Doors. (cabin, cargo compartment, emergency escape, service, and access).</p> <p>a. Inspect all exterior doors, hatches, and servicing access panels for general condition and installation.</p> <p>b. Check for damage, corrosion, security of attachment, and the application of corrosion prevention treatment. Pay particular attention to doorjamb areas and door seals. Check doors for proper operation.</p> <p>c. Check the hold open latches on floor-level doors for general condition and proper operation.</p> <p>d. For aircraft with a ventral exit, check that it has provisions to prevent it from being opened during flight. For inward opening doors check for a means to prevent crowding against the door.</p> <p>e. Check that these emergency doors and or hatches/plugs can be opened from the inside by the flightcrew, as well as from the outside of the aircraft in normal ground configuration by emergency rescue personnel.</p> <p>f. Check viewing ports for damage, deterioration, distortion, and security to permit viewing the conditions outside the exit(s) when closed.</p>	<p>§ 121.310</p> <p>AC 20-60, Accessibility to Excess Emergency Exits</p> <p>AC 25.783-1A, Fuselage Doors and Hatches</p>

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
	<p>g. Check for a provision for a visual inspection of the door locking mechanism to determine that doors are fully closed and locked (excluding inward-opening doors).</p> <p>h. If repairs are noted, check the repair data at the certificate holder's record repository for FAA-approved data.</p> <p>i. Check for the appropriate amount and type of exits.</p>	
16	<p>Fuel Tank Impact Resistant Access Doors. Inspect for general condition, security and position marking. Refer to part 25, § 25.963</p>	§ 121.316
ENGINES		
17	<p>Engines, Mounting Structure, and Compartments.</p> <p>a. Inspect for cleanliness, general condition, loose/missing equipment, breakage, signs of fluid leaks, corrosion, proper installation, and other indications of defects.</p> <p>b. Check fire extinguishing system components and extinguishing agent indicators.</p> <p>c. Inspect the visible inlet guide vanes; and compressor and turbine blades for dents, erosion, nicks and other irregularities. Check the electronic engine control (EEC)/full-authority digital engine control (FADEC) unit (if installed) for general condition, corrosion, and security.</p> <p>d. Check electrical wiring for condition and security.</p>	<p>AC 43-204</p> <p>AC 43-206, Inspection, Prevention, and Repair of Corrosion on Avionics Equipment</p>
18	<p>Engine Nacelles.</p> <p>a. Check for general condition, dents, scratches, loose or missing fasteners, corrosion, erosion, etc.</p> <p>b. Check acoustic panels for general condition.</p>	<p>AC 43-204</p> <p>AC 43-206</p>

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
19	Thrust Reversers and Blocker Doors. Check for general condition, dents, corrosion, fluid leaks, proper installation and indications of defects. If repairs are noted, verify at the operator's records repository repair data for FAA-approved data.	AC 43-204
20	Auxiliary Power Unit. <p>a. Inspect the APU for cleanliness, fire containment shrouds, and seals for general condition.</p> <p>b. Check exhaust ducts for general condition, signs of leaks, and proper mounting.</p> <p>c. Check for loose/missing equipment, breakage, signs of fluid leaks, corrosion, proper installation, and indications of defects.</p> <p>d. Check the APU EEC/FADEC unit (if installed) for general condition, corrosion, and security.</p> <p>e. Check APU compartment for general condition, corrosion, and damage.</p> <p>f. If the rear-pressure bulkhead is visible, check for condition, corrosion, and evidence of damage and repairs.</p> <p>g. Check the exposed airframe structure for general condition, corrosion, damage, and repairs.</p> <p>h. Check the condition of the fire extinguishing system components and extinguishing agent indicators.</p> <p>i. Check that the power cable(s) is isolated from flammable fluid lines, or shrouded by a nonmetallic, flexible conduit in addition to the cable insulation.</p> <p>j. Check all wiring and power cables for proper attachment, routing, and security to the airframe structure.</p>	AC 43.13-1, Acceptance Methods, Techniques, and Practices—Aircraft Inspection and Repair

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
21	Identification of Engines. a. Check for the presence of a fireproof identification plate or other approved marking on each engine, as required by the referenced data. b. Verify the data with the operator's supplied data sheet.	§§ 45.11, 45.13 AC 45-3, Installation, Removal, or Change of Identification Data and Identification Plates on Aircraft Engines AC 43-17
22	Identification of the APU. a. If applicable, check for the presence of a fireproof identification plate or other approved marking containing the data required by the referenced data. b. Verify the data with the operator's supplied data sheet.	§§ 45.11, 45.13 AC 43-17 AC 45-3
23	Electronic Engine Controls Including APU FADEC. a. If applicable, check for installation and security of the EEC and mounting hardware. b. Check electrical cabling and connectors for general condition, corrosion, and security. c. Verify the installation of proper version software at the operator's records repository.	Part 33, § 33.28 AC 33.28-1, Compliance Criteria for 14 CFR § 33.28, Aircraft Engines, Electrical and Electronic Engine Control Systems
PROPELLERS		
24	Identification of Propellers, Propeller Blades, and Propeller Hubs. a. Verify that each propeller, propeller blade, and propeller hub is identified in accordance with the referenced guidance material. b. Verify the data with the operator's supplied data sheet.	§§ 45.11, 45.13 AC 45-2, Identification and Registration Marking
25	Propeller Inspection. a. Inspect the condition and security of spinner, blades, hub, pitch locks (if installed or visible), anti/deicing slip ring, brushes and wiring (if installed), boots and electrical wiring, etc.	AC 33.28-1 AC 43-204 AC 43-206

ITEM	FUSELAGE, EXTERIOR, ENGINES, AND PROPELLERS	REFERENCE
	<p>b. Check composite blades for erosion, disbonding, delamination; and check the ultraviolet coating for condition.</p> <p>c. Check leading edges for condition and attachment.</p> <p>d. For metal blades, check for general condition and leading edges for erosion, nicks and dents.</p> <p>e. Check the aircraft records for FAA-approved repair data.</p>	

Table 10–20, Fuselage Interior

ITEM	FUSELAGE INTERIOR	REFERENCE
	General Visual Inspection. This inspection is a visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light. This inspection may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to access the area being checked. Use normal inspection aids as required, such as inspection mirrors, etc.	49 U.S.C., § 44713 8900.1 Volume 6, Chapter 2, Section 4 8900.1 Volume 6, Chapter 2, Section 5, Conduct Ramp Inspection on Cargo Loading
1	Aircraft Registration. Each aircraft must have inside it an effective U.S. registration certificate issued to its owner; or for operation in the U.S., the second duplicate (pink) copy of the Aircraft Registration Application; or a registration certificate issued under the laws of an International Civil Aviation Organization (ICAO) member country. The certificate must be displayed in accordance with the certificate holder's requirements.	Part 121, § 121.153 Part 91, § 91.203
2	Airworthiness Certificate. Except as provided in 14 CFR part 91, § 91.715, Special Flight Operations for Foreign Civil Aircraft, there must be within the aircraft an	§ 121.153 §§ 91.203, 91.715

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>appropriate and current airworthiness certificate. It must be the original (not a copy), and must be displayed at the cabin or cockpit entrance so that it is legible to passengers or crew, and in accordance with the certificate holder's requirements.</p> <p>NOTE: For a foreign airworthiness certificate, check for the expiration date.</p>	
3	<p>Federal Communications Commission (FCC) Radio Station License. This is required for other-than-domestic operations. This license must be issued to the aircraft operator, and must be updated if the addition of the aircraft results in the operator's fleet exceeding the number of aircraft for which the license was issued.</p> <p>NOTE: No FAA regulatory requirement. FCC, ICAO articles 29 and 30.</p>	
4	<p>General Placards and Markings. Verify the presence and inspect the condition of cabin interior placards and markings in accordance with the certificate holder's manual, TCDS, STC, AFM, and chapter 11 of the Aircraft Maintenance Manual (AMM).</p>	<p>Part 25, §§ 25.791, 25.1541</p> <p>Part 121, §§ 121.310, 121.317</p>
5	<p>General Equipment Installation. Inspect the proper condition, security, and configuration of equipment and systems.</p>	<p>Part 121, §§ 121.153, 121.367</p>
6	<p>Cockpit Voice Recorder (CVR). Large, turbine-engine-powered, or large pressurized airplanes with four reciprocating engines, must have an approved CVR installed. Check for proper condition (e.g., color of recorder case and reflective tape), security, and configuration.</p>	<p>Part 25, § 25.1457</p> <p>Part 91, § 91.609</p> <p>Part 121, § 121.359</p> <p>8900.1 Volume 4, Chapter 14, Section 9, Monitor Cockpit Voice Recorders</p>
7	<p>Flight Data Recorder (FDR) System. Check for proper condition (e.g., color of recorder case and reflective tape), security, and configuration.</p>	<p>§ 91.609</p> <p>Part 25, § 25.1459</p> <p>8900.1 Volume 4, Chapter 14, Section 8</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
8	<p>Underwater Locator Beacons (ULB).</p> <p>a. Verify that approved ULBs are either attached to the CVR and FDR, or installed in a location from which the ULBs are not likely to become separated from the CVR and FDR.</p> <p>b. Verify that battery expiration dates are not exceeded.</p>	<p>§ 121.359</p> <p>8900.1 Volume 4, Chapter 14, Section 8</p>
9	<p>Compartment Interiors/Fire Resistance.</p> <p>a. Look on the backs of cushions to identify if the seats have been fire-blocked. The cushions should meet the requirements of part 25, § 25.853(c). Review documentation of flame testing. Includes material for wall, furnishings, and ceiling.</p> <p>b. The following is excerpted from part 121, § 121.312(e):</p> <p>Thermal/acoustic insulation materials. For transport category airplanes type certificated after January 1, 1958:</p> <p>(1) For airplanes manufactured before September 2, 2005, when thermal/acoustic insulation is installed in the fuselage as replacements after September 2, 2005, the insulation must meet the flame propagation requirements of Sec. 25.856 of this chapter, effective September 2, 2003, if it is:</p> <p>(i) Of a blanket construction or</p> <p>(ii) Installed around air ducting.</p> <p>(2) For airplanes manufactured after September 2, 2005, thermal/acoustic insulation materials installed in the fuselage must meet the flame propagation requirements of Sec. 25.856 of this chapter, effective September 2, 2003.</p> <p>(3) For airplanes with a passenger capacity of 20 or greater, manufactured after September 2, 2009, thermal/acoustic insulation materials installed in the lower half</p>	<p>§ 25.853</p> <p>Part 121, §§ 121.215, 121.312, 121.312(e)</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	of the fuselage must meet the flame penetration resistance requirements of Sec. 25.856 of this chapter, effective September 2, 2003.	
10	<p>Fuselage Interior (Cabin and Equipment Compartments).</p> <p>a. Inspect interior and compartments for cleanliness, general condition, loose and/or missing equipment, deterioration, leakage, corrosion, proper installations, and other indications of defects. Pay particular attention to control cables and fluid lines.</p> <p>b. Inspect for the proper application of corrosion prevention treatments in the forward and rear pressure bulkhead, interior, and accessible under-floor areas.</p>	<p>§ 121.367</p> <p>8900.1 Volume 6, Chapter 2, Section 6</p> <p>Conduct Spot Inspection of Operator's Aircraft</p>
11	<p>Lavatory Placard. The lavatory must have a sign or placard stating, "Federal Law provides for a penalty of up to \$2,200 (or \$2,000), as applicable, for tampering with the smoke detector installed in this lavatory." Refer to 8900.1 volume 6, chapter 2, section 4, Figure 6-17.</p>	<p>Part 121, § 121.317</p> <p>14 CFR part 13, § 13.305</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p>
12	<p>Floor Surfaces. The floor surface of all areas, which are likely to become wet in service, must have slip resistant properties.</p>	<p>Part 25, § 25.793</p>
13	<p>Ashtrays. If smoking is to be allowed in any other compartment occupied by the crew or passengers, an adequate number of self-contained, removable ashtrays must be provided for all seated occupants. Lavatories must have self-contained, removable ashtrays located conspicuously on or near the entry side of each lavatory door, except that one ashtray may serve more than one lavatory door if it can be seen readily from the cabin side of each lavatory served. Refer to 8900.1 volume 6, chapter 2, section 4, Figure 6-17, and AC 25-17, Transport Airplane Cabin Interiors Crashworthiness Handbook paragraphs 621 and 626.</p>	<p>Part 121, § 121.215</p> <p>AC 25-17</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
14	<p>Waste Receptacle. Each receptacle used for the disposal of flammable waste material must be fully enclosed, constructed of at least fire resistant materials, and must contain fires likely to occur in it under normal use. The capability of the receptacle to contain those fires under all probable conditions of wear, misalignment, and ventilation expected in service must be demonstrated by test.</p> <p>AD 74-08-09 requires operators to inspect all lavatory paper and linen waste receptacle enclosure access doors and disposal doors for proper operation, fit, sealing, and latching for the containment of possible trash fires. A placard containing the legible words “No Cigarette Disposal” must be located on or near each disposal receptacle door.</p>	<p>§ 121.215</p> <p>AD 74-08-09</p>
15	<p>Ventilation. Where partitions between compartments have louvers or other means that allow air to flow between compartments, there must be a means convenient to the crew for closing the flow of air through the partitions, when necessary.</p> <p>NOTE: Emphasize with new or altered interiors (STC).</p>	<p>Part 121, § 121.219</p>
16	<p>Carriage of Cargo in Passenger Compartments.</p> <p>a. Ensure that each compartment or area used for the stowage of cargo and/or baggage provides protection to the passengers and crewmembers from injury by its contents.</p> <p>b. Ensure that there are provisions to prevent the cargo/baggage from becoming a hazard by shifting.</p> <p>c. Ensure that a compartment used for stowage is placarded for its weight limits.</p>	<p>Part 121, §§ 121.285, 121.589</p> <p>8900.1 Volume 3, Chapter 33, Section 6, Operations—Cabin Safety</p>
17	<p>Galleys/Service Centers. Verify proper approval. Inspect the following: Trash bin lids for fit; storage compartment restraints; stationary cart tie-downs; lower lobe equipment and restraints; lift operation; and</p>	<p>§ 121.367</p> <p>AC 25-17</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	galley supplies stowage. Refer to AC 25-17 paragraph 123.	
18	<p>Stowage Compartments. Check weight restriction placards and the doors for proper latching, if applicable. Each compartment for the stowage of cargo, baggage, carry-on articles, and equipment (such as liferafts), and any other stowage compartment must be designed for:</p> <ul style="list-style-type: none"> a. Its placarded maximum weight of contents. b. The critical load distribution at the appropriate maximum load factors corresponding to the specified flight and ground load conditions. c. The emergency landing conditions of part 25, § 25.561(b). <p>If the airplane has a passenger-seating configuration (excluding pilots' seats) of 10 seats or more, each stowage compartment in the passenger cabin (except for under-seat and overhead compartments for passenger convenience) must be completely enclosed. There must be a means to prevent the contents in the compartments from becoming a hazard by shifting under the specified loads. For stowage compartments in the passenger and crew cabin, if the means used is a latched door, the design must consider in-service wear and deterioration.</p>	<p>§ 25.561 §§ 121.285, 121.589</p>
19	<p>Retention of Items of Mass in Passenger and Crew Compartments and Galleys. Means must be provided to prevent each item of mass (that is part of the airplane type design) in a passenger or crew compartment or galley from becoming a hazard by shifting under the appropriate maximum load factors corresponding to the specified flight and ground load conditions, and to the emergency landing conditions of § 25.561(b).</p>	<p>Part 121, §§ 121.576, 121.589 Part 91, § 91.523 § 25.561 8900.1 Volume 3, Chapter 33, Section 6</p>
20	<p>Handholds. If the seat backs do not provide a firm handhold, there must be a handgrip or</p>	<p>Part 25, § 25.785(j)</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	rail along each aisle to enable people to steady themselves while using the aisles in moderately rough air. Refer to AC 25-17, paragraph 81(d).	AC 25-17
21	<p>Emergency Equipment for Extended Overwater Operations/Uninhabited Terrain Areas. Ensure the following for each item of emergency and flotation equipment:</p> <p>a. Is regularly inspected in accordance with inspection periods established in the OpSpecs to ensure its condition for continued serviceability and immediate readiness to perform its intended emergency purposes.</p> <p>b. Is readily accessible to the crew, and regarding equipment located in the passenger compartment, to passengers.</p> <p>c. Is clearly identified and marked to indicate its method of operation.</p> <p>d. Is stored in a compartment or container marked as to its contents. The compartment, container, or the item, must indicate date of last inspection.</p>	<p>Part 25, § 25.1415</p> <p>Part 121, §§ 121.309, 121.339, 121.353</p> <p>AC 120-47, Survival Equipment for Use in Overwater Operations</p>
	<p>Life Preservers. Ensure that the aircraft is equipped with an approved flotation means for each occupant. Each life preserver must:</p> <p>a. Be equipped with an approved survivor locator light.</p> <p>b. Be readily removable from the airplane.</p>	<p>§ 121.339</p> <p>Part 91, § 91.509</p> <p>AC 120-47</p> <p>Technical Standard Order (TSO)-C13f, Life Preservers</p>
	<p>Liferafts. Ensure the aircraft is equipped with enough liferafts of a rated capacity to accommodate the occupants of the airplane.</p> <p>a. Ensure the rafts have approved survivor locator lights.</p> <p>b. Ensure that the total capacity of the equipped rafts will accommodate all the passengers of the airplane in the event there is a loss of one raft with the largest capacity.</p>	<p>§ 121.339</p> <p>AC 120-47</p> <p>TSO-C70a, Liferafts (Reversible and Nonreversible)</p>
	Survival Kits. Must be attached to each required liferaft.	<p>§ 91.509</p> <p>§§ 121.339, 121.353</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
		AC 120-47
	Pyrotechnic Signaling Device. Ensure there is at least one device for each liferaft. Uninhabited terrain: suitable pyrotechnic devices.	§ 91.509 §§ 121.339, 121.353 AC 120-47
	Survival Emergency Locator Transmitters. a. Must be approved. b. Check for the expiration date. c. Refer to §§ 121.339 and 121.353 for battery information.	§ 91.509 §§ 121.339, 121.353 AC 120-47
22	Oxygen Equipment and Supply (Drop-Down Oxygen Masks). Verify: a. Oxygen pressure vessel inspections comply with DOT (if applicable). b. Continuous-flow oxygen mask assemblies meet the requirements of TSO-C64b, Oxygen Mask Assembly Continuous Flow, Passenger. c. Demand-type oxygen regulators meet the requirements of TSO-C89a, Oxygen Regulators, Demand. d. Hydrostatic test dates of all fixed oxygen bottles (if applicable). e. Aircraft documents properly describe distribution of the oxygen masks in the passenger compartment, ensuring that the quantity of oxygen masks exceed the number of seats by at least 10 percent. f. The 10 percent of extra oxygen masks are uniformly distributed throughout the cabin. g. Each lavatory oxygen-dispensing unit is equipped with two oxygen masks. h. Each lavatory oxygen-dispensing unit above the flight attendant jump seats is equipped with two oxygen masks. i. All oxygen masks are designed to cover the nose and mouth, and are equipped with a	Part 25, § 25.1443 Part 91, § 91.211 Part 121, § 121.333 TSO-C64b TSO-C89a

ITEM	FUSELAGE INTERIOR	REFERENCE
	means to secure the mask to a person's face.	
23	<p>Emergency Equipment. Check to ensure that each item of emergency and flotation equipment listed below:</p> <ul style="list-style-type: none"> a. Is readily accessible to the crew, and regarding equipment located in the passenger compartment, to passengers. b. Is clearly identified and clearly marked to indicate its method of operation. c. Is in a compartment or container marked as to its contents; and the compartment, container, or the item, must indicate the date of last inspection. d. Meets preflight requirements per flight attendant manual and/or flight operations manual, as applicable. 	<p>§ 121.309 Part 91, § 91.513</p>
	<p>Portable Oxygen Bottles (POB). Check:</p> <ul style="list-style-type: none"> a. That the required number(s) of portable oxygen bottles are onboard, and that the POBs provide oxygen flow of at least 4 liters per minute, but not less than 2 liters per minute. b. That each portable oxygen bottle has its own mask and tubing, and that the crew can determine if oxygen is being delivered. c. That the continuous-flow oxygen mask assemblies meet the requirements of TSO-C64b. d. That the oxygen pressure vessel inspections comply with DOT. e. The hydrostatic test dates. 	<p>§ 25.1443 Part 121, §§ 121.329, 121.333 TSO-C64b</p>
	<p>Flotation Devices (non-extended overwater operations). Verify that:</p> <ul style="list-style-type: none"> a. The aircraft is equipped with an approved (TSO-C72c, Individual Flotation Devices) flotation means for each occupant (includes lap children). b. The flotation means are within easy reach of each seated occupant. 	<p>Part 121, § 121.340 AC 20-56, Marking of TSO-C72b Individual Flotation Devices TSO-C72c</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>c. The flotation means are readily removable from the airplane.</p>	
	<p>Hand Fire Extinguishers.</p> <p>a. Ensure that each extinguisher is an approved type, and that the type and quantity of extinguishing agent is the most suitable for the kinds of fires that are likely to occur in the compartment.</p> <p>b. Check the extinguishers to ensure they meet the preflight requirements in the Flight Attendant Manual or Flight Operations Manual.</p> <p>Passenger Compartment.</p> <p>a. Ensure that fire extinguishers are conveniently located. If more than two are installed, ensure uniform distribution.</p> <p>b. For the required quantities of extinguishers, refer to part 121, § 121.309(c)(5).</p> <p>c. Ensure that at least one extinguisher contains Halon 1211 or equivalent.</p> <p>Galley Compartments. Ensure that at least one hand fire extinguisher is conveniently located and easily accessible for use in the galley.</p>	<p>§ 91.513</p> <p>§ 121.309</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p> <p>Part 25, § 25.851</p> <p>AC 25-17</p> <p>TSO-C19b, Portable Water Solution Type Fire Extinguishers</p>
	<p>Megaphones. Ensure that the aircraft is equipped with one megaphone for more than 60 passengers and two for more than 99 passengers. Ensure that it is properly secured.</p>	<p>Part 25, § 25.1421</p> <p>§ 91.513</p> <p>§ 121.309</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p> <p>TSO-C137a, Aircraft Portable Megaphones</p>
	<p>Portable Lights. Ensure the aircraft is equipped with a flashlight stowage provision that is accessible from each flight attendant seat.</p>	<p>Part 121, § 121.310</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>Protective Breathing Equipment (PBE).</p> <p>a. If there is a Class A, B, or E cargo compartment, ensure that PBE is installed for the use of appropriate crewmembers.</p> <p>b. Ensure that PBE is installed in each isolated, separate compartment in the airplane, including upper and lower lobe galleys, in which crewmember occupancy is permitted during flight for the maximum number of crewmembers expected to be in the area during any operation. Refer to § 25.1439 for requirements.</p> <p>c. Ensure the PBE meets the requirements of TSO-C99A, Flight Deck (Sedentary) Crewmember Protective Breathing Equipment.</p> <p>d. Ensure the PBE meets the preflight requirement in the Flight Attendant Manual or Flight Operations Manual (refer to part 121, § 121.337(c)). Ensure the PBE is within 3 feet of the required fire extinguisher(s) (refer to § 121.337(b)(9)).</p>	<p>§ 25.1439</p> <p>§ 121.337(c)</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p> <p>TSO-C99A</p>
24	<p>Emergency Medical Equipment.</p> <p>First-Aid Kits.</p> <p>a. Ensure the minimum number of first-aid kits are onboard (refer to part 121, appendix A for requirements).</p> <p>b. Ensure the first aid kits meet the contents that are required by part 121, appendix A.</p> <p>c. Ensure that the first-aid kits meet the preflight requirements in the Flight Attendant Manual or Flight Operations Manual.</p> <p>NOTE: Arm and leg splints may not fit in the first-aid kit. They are to be stowed in a readily accessible location that is near the kit.</p>	<p>§ 91.513</p> <p>Part 121, § 121.803</p> <p>Part 121, appendix A</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p> <p>AC 121-33B, Emergency Medical Equipment</p>
	<p>Emergency Medical Kit.</p> <p>a. Ensure that the emergency medical kit</p>	<p>§ 121.803</p> <p>Part 121, appendix A</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>meets the content requirements of part 121, appendix A.</p> <p>NOTE: If all of the required items do not fit into one container, then more than one container may be used.</p> <p>b. Ensure that it meets the preflight requirements as set forth in the Flight Attendant Manual or Flight Operations Manual.</p>	<p>8900.1 Volume 6, Chapter 2, Section 4 AC 121-33B</p>
	<p>Automatic External Defibrillators (AED).</p> <p>a. Ensure that at least one approved AED is stored in the passenger cabin.</p> <p>b. Ensure that it meets the preflight requirements in the Flight Attendant Manual or the Flight Operations Manual.</p> <p>c. Ensure that it meets the TSO requirements for power sources, effective April 30, 2005.</p> <p>d. Ensure that it is maintained according to the manufacturer's specifications.</p> <p>NOTE: Airplanes with a flight attendant and a payload of more than 7,500 lb must have AEDs.</p>	<p>§ 121.803 Part 121, appendix A AC 121-33B TSO-C142a, Non-Rechargeable Lithium Cells and Batteries</p>
25	<p>Passenger Seats, Berths, Safety Belts, and Harnesses. Verify that:</p> <p>a. Seats do not block the emergency escape exit.</p> <p>b. Seats are secure in seat track (random sample).</p> <p>c. Seat break-over pressure is in accordance with operator's maintenance program (random sample).</p> <p>d. The "Fasten Seat Belt While Seated" placards are viewable from all seats.</p> <p>e. Seat belts have metal-to-metal latches and are in good condition (random sample).</p> <p>f. Each seat, berth, safety belt, and harness</p>	<p>Part 91, §§ 91.107, 91.521 Part 121, §§ 121.311, 121.317 AC 25-17 TSO-C22g TSO-C39c TSO-C114</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>(if installed) is designed so that a person properly using these devices will not suffer serious injury in an emergency landing.</p> <p>g. Each passenger seat or berth is equipped with a safety belt (TSO-C22g, Safety Belts) with a metal-to-metal latching device.</p> <p>h. Each seat and berth is normally approved by TSO-C39c, 9g Transport Airplane Seats Certified by Static Testing, or other approved methods. For sideward facing seats, ensure that a safety belt and shoulder harness (TSO-C114, Torso Restraint System) will prevent the head from contacting any object that would injure the person sitting in such a seat.</p> <p>i. Each occupant is protected from head injury by a safety belt when there are no objects within head strike range that would cause injury. Ensure a safety belt plus a cushioned rest supports the arms, shoulders, head, and spine.</p> <p>j. If the seatbacks do not provide a firm handhold, that there is a handgrip or rail along each aisle (seat back break-over).</p> <p>k. Any projecting object that could cause injury is padded to ensure that people who are seated or moving about the airplane in normal flight will not be injured.</p> <p>l. That there are no more than three seats on each side of the aisle if the aircraft has a single aisle.</p>	
26	<p>Cabin Attendant Seats, Berths, Safety Belts, and Harnesses. Pull the jump seat down to ensure it retracts (those in path of exits). The seats should be positioned so that when not in use, they will not interfere with the use of the passageways and exits.</p> <p>a. If applicable, ensure that the jump seat retracts automatically.</p> <p>b. Ensure that flight attendant jump seats are in the passenger compartment near</p>	<p>§§ 25.562, 25.785</p> <p>§ 91.521</p> <p>§ 121.311</p> <p>AC 25-17</p> <p>AC 25.785-1</p> <p>TSO-C22g</p> <p>TSO-C114</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>approved floor-level emergency exits, unless another location has been approved.</p> <p>c. Ensure that each flight attendant jump seat position is equipped with a combination shoulder harness and lap belt that has a single-point, metal-to-metal latching system.</p> <p>d. Inspect seatbelts for proper approval (e.g., TSO-C22g or equivalent), metal-to-metal latching, and general condition.</p> <p>e. Ensure the torso restraint meets the requirements of TSO-C114 or equivalent.</p> <p>f. Ensure that the shoulder harness/lap belt has a means to be secured when not in use to prevent rapid egress in an emergency.</p> <p>g. Ensure that the flight attendant, when seated, has a direct view of the cabin that they are responsible for, without compromising their proximity to the floor level exit.</p> <p>h. Ensure that the flight attendant jump seats are located in an area that would minimize the probability that the occupants would suffer injury by being struck by items that were dislodged from service areas, stowage compartments, or service equipment.</p> <p>i. If the aircraft was manufactured after March 6, 1980, verify that flight attendant jump seats provide a direct view of the cabin area for which the occupant of each of the seats is responsible. Direct view is defined as a view (without head movement) of at least 50 percent of the entire passenger seating areas, at least 25 percent of any zone, and 100 percent of passenger aisles.</p>	
27	Width of Aisle. Ensure that the width of the aisle at any point between passenger seats meets the requirements of part 25, § 25.815.	8900.1 Volume 6, Chapter 2, Section 4 Part 121, § 121.291
28	Passenger Safety Information Briefing Cards. While onboard the aircraft, perform a random sampling of the Passenger Briefing Card to ensure its proper distribution, that it is conveniently located for each passenger, and	Part 121, §§ 121.571, 121.585 8900.1 Volume 6, Chapter 2, Section 4 AC 121-24, Passenger Safety Information Briefing and Briefing Cards

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>that the card:</p> <ul style="list-style-type: none"> a. Includes information that is pertinent to that type and model of aircraft. b. Contains diagrams of and methods of operating the emergency exits. Ensure that the cards concur with the placards located on and/or near the emergency exits. c. If applicable, contains instructions necessary for the use of emergency equipment. d. Meets all of the requirements of part 121, § 121.585(d) and (e) regarding exit row seating. A separate card may have been designed specifically for the exit row seated passengers; ensure that it meets the above listed requirements. 	
29	<p>“Smoking”/“No Smoking” Signs. If smoking is prohibited there must be at least one placard stating such, and it must be legible to each person seated in the cabin. If smoking is allowed, and if the crew compartment is separate from the passenger compartment, there must be at least one sign notifying when smoking is prohibited. Signs that notify when smoking is prohibited must be operable by a member of the flightcrew, and when illuminated, must be legible under all probable conditions of cabin illumination to each person seated in the cabin. A placard must be located on or adjacent to the door of each receptacle used for the disposal of flammable waste materials to indicate that use of the receptacle for disposal of cigarettes, etc., is prohibited. Lavatories must have “No Smoking” or “No Smoking in Lavatory” placards conspicuously located on, or adjacent to, each side of the entry door. Symbols that clearly express the intent of the sign or placard may be used in lieu of letters.</p>	Part 25, § 25.791
30	<p>“Fasten Seat Belt” Signs. Signs that notify when seat belts should be fastened and that are installed to comply with the operating</p>	<p>Part 121, § 121.317 § 25.791 AC 25-17</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	rules of this chapter must be operable by a member of the flightcrew, and when illuminated, must be legible under all probable conditions of cabin illumination to each person seated in the cabin. Symbols that clearly express the intent of the sign or placard may be used in lieu of letters.	
31	<p>Doors (Other than Flight Deck). Lavatory doors must be designed to ensure that no one will become trapped inside, and if equipped with a locking device, it must be capable of being unlocked from the outside without the aid of special tools. (AC 25-17, paragraph 412a(f))</p> <p>If there is a door that separates the passenger cabin from other areas, and it is necessary to pass through the doorway to reach any required emergency exit, the door must have a means to latch it in the open position. The door must be open for each takeoff and landing. If the airplane is equipped with a crew rest area that has separate entries from the flight deck and the passenger compartment, the door between the crew rest area and the passenger compartment must have a locking means.</p>	Part 121, § 121.313 AC 25-17
32	Door Placard. A placard is required on each door that is the means of access to a required passenger emergency exit, to indicate that it must be open during takeoff and landing.	§ 121.313
33	<p>Emergency Exits.</p> <p>a. Ensure that the number of emergency exits meets or exceeds requirements of the passenger-seating configuration.</p> <p>b. If applicable, ensure that the step down distance for Type II, III, and IV exits meet part 25, § 25.807.</p> <p>c. For an airplane that is required to have more than one emergency exit for each side of the fuselage, no passenger exit may be more than 60 feet from any adjacent passenger emergency exit on the same side,</p>	Part 121, § 121.310 Part 25, §§ 25.807, 25.809, 25.813 AC 25-17 AC 20-60

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>same deck, as measured parallel to the airplanes longitudinal axis between the nearest exit edges.</p> <p>d. A ventral or tail-cone exits must be designed and constructed so that it cannot be opened during flight. It must be marked with a placard that is readable from 30 inches away. The placard must be placed conspicuously near the means for opening the exit; it must state that the exit was designed and constructed so that it cannot be opened during flight.</p> <p>e. Passenger compartment emergency exits that are in excess of the minimum number of required emergency exits must be readily accessible and meet all of the applicable provisions of part 121, § 121.310(f).</p>	
34	<p>Emergency Evacuation.</p> <p>a. Ensure that each crew and passenger area has an emergency means to allow rapid evacuation in crash landings with landing gear extended or retracted. Refer to part 25, § 25.803</p> <p>b. Passageways that lead to emergency exits must be unobstructed.</p> <p>c. There must be adequate space to allow crewmembers(s) to assist in the evacuation of passengers.</p>	<p>§ 121.310</p> <p>§ 25.803</p> <p>AC 25-17</p>
35	<p>Lower-Deck Service Compartment (Including Galleys). For airplanes that have a service compartment located below the main deck that may be occupied during taxi or flight, but not during takeoff or landing, the following apply:</p> <p>a. There must be at least two emergency evacuation routes, one at each end of the lower service compartment, or there must be two emergency evacuation routes that have sufficient separation within each compartment, which could be used to rapidly evacuate to the main deck under normal and emergency conditions.</p>	<p>Part 25, § 25.819</p> <p>AC 25-17</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>b. The routes must provide for the evacuation of incapacitated persons, with assistance.</p> <p>c. The use of the evacuation routes may not be dependent upon any power sources.</p>	
36	<p>Emergency Exit Markings. Verify that:</p> <p>a. Each passenger emergency exit, its means of access, and its means of opening, must be conspicuously marked. Means must be provided to assist occupants in locating exits in conditions of dense smoke.</p> <p>b. The identity and location of each passenger emergency exit must be recognizable from a distance equal to the width of the cabin.</p> <p>c. A sign visible to occupants approaching along the main aisle must indicate the location of each emergency exit.</p> <p>d. There must be a locating sign:</p> <ol style="list-style-type: none"> 1) Above the aisle near each over-the-wing passenger emergency exit, or at another ceiling location if it is more practical because of low headroom. 2) Next to each floor-level passenger emergency exit (one sign may serve two exits if both can be readily seen from the sign). 3) On each bulkhead or divider that prevents fore and aft vision along the passenger cabin (if this is not possible, the sign may be placed at another appropriate location). <p>e. Each passenger emergency exit locator sign and each passenger emergency exit marking sign must have red letters at least 1½ inches high on an illuminated white background.</p> <p>NOTE: The above colors can be reversed.</p> <p>Emergency Exit Operating Handles.</p>	<p>§ 121.310</p> <p>§ 25.811</p> <p>AC 25-17</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>a. For an aircraft in which the type certification was filed before May 1, 1972, the location of each passenger emergency exit operating handle, and instructions for opening the exit, must be shown by a marking on or near the exit that is readable from 30 inches away.</p> <p>b. For Type I and II emergency exits with a locking mechanism released by rotary motion of the handle, the instructions must be shown by:</p> <ol style="list-style-type: none"> 1) A red arrow with a shaft at least $\frac{3}{4}$-inch wide and a head twice the width of the shaft. 2) The word “open” in red letters, 1-inch tall, placed horizontally near the head of the arrow. <p>c. Each Type A, B, C, or Type 1 passenger emergency exit operating handle must be self illuminated or be conspicuously located and well illuminated by the emergency lighting even in conditions of occupant crowding at the exit.</p> <p>Type III exits must be placarded with the weight of the exit and indicating an appropriate location to place the hatch after removal.</p>	
37	<p>Emergency Lighting.</p> <p>a. Inspect the interior and exterior emergency lighting and escape path markings to the applicable airworthiness and operating rules, and to its approved configuration (STC, TC, etc.).</p> <p>b. Verify the system is designed so that each light is manually operable, both from the flight deck and from a point in the passenger cabin, that is readily accessible to the flight attendant seat.</p> <p>c. The lights must be safeguarded to prevent inadvertent operation.</p> <p>d. Verify that each light has a flight deck</p>	<p>§ 121.310</p> <p>§ 25.812</p> <p>AC 25.812-1, Floor Proximity Emergency Escape Path Marking</p> <p>AC 25.812-2, Floor Proximity Emergency Escape Path Marking Systems Incorporating Photoluminescent Elements</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>control device that has an “on,” “off,” and “armed” position.</p> <p>e. There must be a flightcrew warning light that illuminates when power is on in the airplane and the emergency lighting control device is not armed.</p> <p>Ensure that the system, when activated, illuminates each passenger exit marking and locating sign, and includes floor proximity lighting emergency escape path markings that meet the requirements of part 25, § 25.812.</p>	
38	<p>Emergency Evacuation Assist Means. Verify that each exit (other than over-wing exits) that is higher than 6 feet from the ground has an approved means to assist the occupants to the ground (slides, ramp/slides, etc). For floor-level exits, verify that:</p> <p>a. Slide-bottle pressures are within acceptable levels.</p> <p>b. Slide containers are properly marked for content (as applicable).</p> <p>c. Slides meet the requirements of TSO-C69c, Emergency Evacuation Slides, Ramps, Ramp/Slides, and Slide/Rafts.</p>	<p>§ 121.310</p> <p>Part 25, § 25.810</p>
39	<p>Special Retroactive Requirements. Each applicant for an STC (or an amendment to a TC) involving an increase in passenger seating capacity to a total greater than that for which the airplane has been type certificated must show that the airplane meets the requirements of part 25, § 25.2</p>	<p>§ 25.2</p>
40	<p>Entertainment Systems.</p> <p>a. Verify by reviewing data and operation that the installed equipment does not conflict or interfere with other TCDS, STC, or field-approved aircraft alterations or modifications.</p> <p>b. Verify the proper incorporation of ICAs for the entertainment system or equipment added to the aircraft since manufacture.</p>	<p>Part 25, § 25.1301</p>
41	<p>Lavatory Fire Protection. The following is</p>	<p>§ 121.308</p>

ITEM	FUSELAGE INTERIOR	REFERENCE
	<p>excerpted from part 121, §§ 121.308(a) and (b):</p> <p>“...No person may operate a passenger-carrying airplane unless each lavatory in the airplane is equipped with a smoke detector system or equivalent that provides a warning light in the flight deck or provides a warning light or audio warning in the passenger cabin that would be readily detected by a flight attendant, taking into consideration the positioning of flight attendants throughout the passenger compartment during various phases of flight.”</p> <p>“Each lavatory in the airplane is equipped with a built-in fire extinguisher for each disposal receptacle for towels, paper, or waste located within the lavatory. The built-in fire extinguisher must be designed to discharge automatically into each disposal receptacle upon occurrence of a fire in the receptacle.”</p>	
42	<p>Crewmember Interphone System. For airplanes with a seating capacity for more than 19 passengers, verify the installation of a crewmember interphone system that meets the requirements of the applicable airworthiness and operating rules.</p>	§ 121.319
43	<p>Public Address System. For airplanes with a seating capacity for more than 19 passengers, verify installation of an approved (part 21, § 21.305) public address system that meets the requirements of the applicable airworthiness and operating rules.</p>	<p>Part 121, § 121.318</p> <p>Part 25, § 25.1423</p> <p>AC 25-17</p>
44	<p>Automatic Type Emergency Locator Transmitter (ELT). Verify that the unit is approved (e.g., TSO-C91a, Emergency Locator Transmitter (ELT) Equipment, or later issued TSOs or equivalent for ELTs) and properly installed for those operations not exempt from the applicable operating rule. For new installations after June 21, 1995, the installed unit may not have been approved under TSO-C91a.</p>	<p>Part 91, §§ 91.205, 91.207</p> <p>TSO-C91a</p>

Table 10–21, Flight Deck

ITEM	FLIGHT DECK	REFERENCE
	<p>General Visual Inspection. This inspection is a visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light. This inspection may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to access the area being checked. Use normal inspection aids as required, such as inspection mirrors, etc.</p>	<p>49 U.S.C., § 44713 8900.1 Volume 6, Chapter 2, Section 4 Part 121, § 121.153</p>
1	<p>Two-Way Radio Communications Systems. For part 25 aircraft, verify the installation of two complete two-way radio communications systems, with controls for each accessible from each pilot station, designed and installed so that failure of one system will not preclude operation of the other system. The systems must include two microphones and two headsets (or one headset and one speaker).</p> <p>For non-part 25 aircraft, verify that the installation meets the basic requirements for at least one complete radio communications system for IFR operations. For overwater and extended-overwater operations, two complete communication systems must be installed. Those systems must include two microphones and two headsets (or one headset and one speaker). For extended-overwater operations, the two systems must be independent.</p>	<p>Part 91, §§ 91.205, 91.511 Part 121, §§ 121.345, 121.347, 121.349</p>
2	<p>Two-Way Radio Communications System. (or other means of communication approved by the Administrator)</p> <p>For communications between each airplane and the appropriate dispatch office, and between each airplane and the appropriate air traffic control unit, except as specified in part 121, § 121.351(c). Determine the certificate holder's method of compliance</p>	<p>Part 121, §§ 121.99, 121.351</p>

ITEM	FLIGHT DECK	REFERENCE
	with part 121, § 121.99. Based on that determination, ensure that the necessary equipment is properly approved and installed in the subject aircraft.	
3	Radio Navigation Systems. For part 25 aircraft, verify the installation of two-radio navigation systems, with controls for each accessible from each pilot station, designed and installed so that failure of one system will not preclude operation of the other system. Notwithstanding the above, for all aircraft, verify the installation of the equipment required by the referenced operating rules and the OpSpecs for specific operational approvals.	Part 91, §§ 91.205, 91.511 Part 121, §§ 121.347, 121.349, 121.351, 121.355 Part 121, appendix G
4	Collision Avoidance System. a. Turbine-powered airplanes of more than 33,000 lb maximum certificated takeoff weight must be equipped with an appropriate class of Mode S transponder that meets TSO-C112, Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Airborne Equipment (or a later version), and one of the following approved units: 1) Traffic Alert and Collision Avoidance System (TCAS) II that meets TSO-C119b, Traffic Alert and Collision Avoidance System (TCAS) Airborne Equipment, TCAS II, (version 7.0), or a later version. 2) TCAS II that meets TSO-C119a, Traffic Alert and Collision Avoidance System (TCAS) Airborne Equipment, TCAS II (version 6.04A Enhanced) that was installed in that airplane before May 1, 2003. If that TCAS II (version 6.04A Enhanced) no longer can be repaired to TSO-C119a standards, it must be replaced with a TCAS II that meets TSO-C119b (version 7.0), or a later version. 3) A collision avoidance system equivalent to TSO-C119b (version 7.0), or a later version, capable of coordinating with units that meet TSO-C119a (version 6.04A	Part 91, § 91.221 Part 121, § 121.356

ITEM	FLIGHT DECK	REFERENCE
	<p>Enhanced), or a later version.</p> <p>b. Passenger or combination cargo/passenger airplanes that have a passenger seat configuration of 10–30 seats must be equipped with either:</p> <ol style="list-style-type: none"> 1) TCAS I that meets TSO-C118, Traffic Alert and Collision Avoidance System (TCAS) Airborne Equipment, TCAS I, or a later version; 2) A collision avoidance system that has a TSO-C118, or a later version; or 3) A collision avoidance system and Mode S transponder that meet paragraph (a)(1) of this section. <p>c. Piston-powered airplanes of more than 33,000 lb maximum certificated takeoff weight must be equipped with one of the following:</p> <ol style="list-style-type: none"> 1) TCAS I that meets TSO-C118 (or a later version). 2) A collision avoidance system equivalent to maximum TSO-C118 (or a later version). 3) A collision avoidance system and Mode S transponder that meet TSO-C112, or a later version, and one of the following approved units: <ol style="list-style-type: none"> a) TCAS II that meets TSO-C119b (version 7.0), or a later version. b) TCAS II that meets TSO C119a (version 6.04A Enhanced) that was installed in that airplane before May 1, 2003. If that TCAS II (version 6.04A Enhanced) can no longer be repaired to TSO-C119a standards, it must be replaced with a TCAS II that meets TSO C119b (version 7.0), or a later version. c) A collision avoidance system equivalent to TSO C119b (version 7.0), or a later version, capable of coordinating with units that meet TSO C119a (version 6.04A 	

ITEM	FLIGHT DECK	REFERENCE
	<p>Enhanced), or a later version.</p> <p>d. Conform the aircraft to the appropriate approved documents.</p>	
5	<p>ATC Transponder. Verify installation of a transponder that meets the requirements of part 91, § 91.215. If installed on or before January 1, 1992, the transponder must meet TSO-C74b, Airborne ATC Transponder Equipment; TSO-C74c, Airborne ATC Transponder Equipment as appropriate (provided that the equipment was manufactured before January 1, 1990); or the appropriate class of TSO-C112 (Mode S). If installed after January 1, 1992 the transponder must be the appropriate class of TSO-C112 (Mode S).</p> <p>NOTE: “Installation” does not include temporary installation of TSO-C74b or TSO-C74c (as appropriate) substitute equipment during maintenance of the permanent equipment; reinstallation of equipment after temporary removal for maintenance; or for fleet operations, installation of equipment in a fleet aircraft after removal of the equipment for maintenance from another aircraft in the same operator’s fleet.</p>	<p>§ 91.215</p> <p>Part 121, § 121.345</p>
6	<p>Airborne Weather Radar System. Persons may not operate any transport-category airplanes (except the C-46 type), and nontransport-category airplanes certificated after December 31, 1964, unless approved airborne weather radar equipment has been installed in the airplane.</p>	<p>Part 121, § 121.357</p>
7	<p>Low-Altitude Wind Shear System.</p> <p>a. Except for turbo-propeller-powered airplanes, all turbine-powered airplanes manufactured after January 2, 1991, must be</p>	<p>Part 121, § 121.358</p>

ITEM	FLIGHT DECK	REFERENCE
	<p>equipped with either an approved airborne wind shear warning and flight guidance system, an approved airborne detection and avoidance system, or an approved combination of these systems.</p> <p>b. The following aircraft must be equipped with either an approved airborne windshear warning and flight guidance system, an approved airborne detection and avoidance system, or an approved combination of these systems: A-300-600; A-310; A-320; B-737-300, 400, 500; B-747-400; B-757; B-767; F-100; MD-11; MD-80 series equipped with an electronic flight instrument system (EFIS) and Honeywell-970 digital flight guidance computer.</p> <p>All other turbine-powered airplanes must be equipped with at least an approved airborne wind shear warning system. These airplanes may be equipped with an approved airborne wind shear detection and avoidance system, or an approved combination of these systems.</p>	
8	<p>Ground Proximity Warning/Glide Slope Deviation Alerting System. Verify that turbine-powered airplanes are equipped with a ground proximity warning system that meets the performance and environmental standards of TSO-C92, Ground Proximity Warning—Glide Slope Deviation Alerting System, (or incorporates TSO-approved ground proximity warning equipment), and a ground proximity warning/glide slope deviation alerting system that meets the performance and environmental standards contained in TSO-C92a or TSO-C92b (or incorporates TSO-approved ground proximity warning-glide slope deviation alerting equipment). If the system is currently deactivated, an entry must have been made in the airplane maintenance record that includes the date and time of deactivation.</p>	Part 121, § 121.360
9	<p>Radio Altimeter. Verify that the installation meets the requirements of the AFM and</p>	AC 120-28, Criteria for Approval of Category III Weather Minima for

ITEM	FLIGHT DECK	REFERENCE
	approved CAT II/III program(s), as applicable.	Takeoff, Landing and Rollout AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach
10	Global Positioning System (GPS). Verify that installations meet appropriate system descriptions, operational procedures, and limitations in the AFM/AOM, as applicable. Also verify that the software version meets the AFM/AOM and certificate holder's requirements. Ensure the aircraft conforms to the aircraft to the appropriate approved documents.	AC 20-138, Airworthiness Approval of Global Navigation Satellite System (GNSS) Equipment
11	Terrain Awareness and Warning System (TAWS). a. Verify that all turbine-powered airplanes manufactured after March 29, 2002, are equipped with FAA-approved TAWS. The installation must also include an approved terrain situational awareness display. All turbine-powered airplanes manufactured on or before March 29, 2002, must be equipped as described above by March 29, 2005. b. Verify the installation of proper operational and terrain database software versions; and that the AFM/AOM contains appropriate procedures for use of the system and proper flightcrew reaction in response to the system's audio and visual warnings.	Part 121, § 121.354
12	Instrument Arrangement, Visibility and Markings. a. Verify the arrangement and visibility of flight and navigation instruments in accordance with the applicable regulations. b. Verify that displayed information and ranges are appropriate to the aircraft and the installed equipment. c. Verify that when markings are on the cover glass of the instrument, there is a means to maintain the correct alignment of the glass cover with the face of the dial.	Part 91, § 91.205 Part 121, § 121.305

ITEM	FLIGHT DECK	REFERENCE
	d. Verify appropriate powerplant instrument markings.	
13	Electronic Flight Instrument System EFIS and Electronic Centralized Aircraft Monitoring. Verify display/pictures in the book match the aircraft AFM/AOM and current software configuration/revision date.	AC 25-11, Electronic Flight Deck Displays
14	<p>Instrument Requirements.</p> <p>a. Airspeed Indicating System. Verify the installation of an approved instrument at each pilot station that is calibrated in knots, and that each airspeed limitation and item of related information in the AFM and pertinent placards are expressed in knots. The system must include a heated pitot tube or equivalent means for preventing malfunctioning due to icing, and must meet all pertinent airworthiness standards.</p> <p>b. Sensitive Altimeter. Verify installation of an approved instrument at each pilot station. The instruments must be adjustable for barometric pressure.</p> <p>c. Sweep-Second Hand Clock. Verify the installation of an approved clock displaying hours, minutes, and seconds with a sweep-second pointer, digital presentation, or approved equivalent.</p> <p>d. Standby Horizon Additional Attitude Instrument. Verify that, if required by part 121, § 121.305(j), and an approved third such instrument is installed in accordance with part 121, § 121.305(k).</p> <p>e. Gyroscopic Bank and Pitch Indicator (artificial horizon, attitude indicator, etc.). Verify the installation of an approved instrument at each pilot station.</p> <p>f. Free Air Temperature Indicator. Verify the installation of an approved free air temperature indicator or an air temperature indicator that provides indications that are convertible to free air temperature.</p>	<p>Part 91, §§ 91.205, 91.217, 91.219</p> <p>Part 121, §§ 121.303, 121.305, 121.313, 121.323, 121.325</p> <p>TSO-C10b, Altimeter, Pressure Actuated, Sensitive Type</p> <p>TSO-C88, Automatic Pressure Altitude Digitizer Equipment</p>

ITEM	FLIGHT DECK	REFERENCE
	<p>g. Gyroscopic Rate of Turn Indicator. Verify that the installation of an approved instrument at each pilot station is combined with an integral slip/skid indicator (turn and bank indicator), except that only slip/skid indicators are required when a third attitude instrument system is installed in accordance with § 121.305(k).</p> <p>h. Gyroscopic Direction Indicator. Verify the installation of an approved directional gyro, or equivalent, at each pilot station.</p> <p>i. Vertical Speed (Rate of Climb) Indicator. Verify the installation of approved instruments at each pilot station.</p> <p>j. Magnetic Compass. Verify the installation of an approved instrument that is visible from each pilot station and that is lighted during night operations. On or near the instrument must be a placard that:</p> <ol style="list-style-type: none"> 1) Shows calibration of the instrument in level flight with the engines operating. 2) States whether the calibration was made with radio receivers on or off. 3) Displays magnetic heading calibration readings, in not more than 45-degree increments for part 25 aircraft, or 30-degree increments for part 23 aircraft. 4) For part 23 aircraft, and except as provided by § 23.1547, the placard must not reflect maximum deviations of more than 10 degrees. 5) When a means is provided for transferring an instrument from its primary operating system to an alternate system, the means must include a positive positioning control and must be marked to indicate clearly which system is being used. 6) The following is excerpted from § 91.219: “No person may operate a turbojet-powered, U.S.-registered civil airplane unless that airplane is equipped with an approved 	

ITEM	FLIGHT DECK	REFERENCE
	altitude alerting system.	
15	<p>Speed Warning Device. Verify installation on turbine engine-powered airplanes, and airplanes with maximum operating speed limit (V_{MO}/M_{MO}) greater than 0.8 demonstrated flight diving speed (V_{DF}/M_{DF}) or 0.8 design diving speed V_D/M_D. The speed warning device must give effective aural warning (differing distinctively from aural warnings used for other purposes) to the pilots, whenever the speed exceeds V_{MO} plus 6 knots or $M_{MO} + 0.01$. The upper limit of the production tolerance for the warning device may not exceed the prescribed warning speed.</p>	Part 91, § 91.603
16	<p>Automatic Pilot System. Verify that indicators and controls meet applicable airworthiness standards, including the requirement that quick release (emergency) controls must be on both control wheels, on the side of each wheel opposite the throttles. Verify that the AFM (and certificate holder's AOM, if applicable) show minimum altitude for use of autopilot.</p> <p>NOTE: If the certificate holder is authorized for category (CAT) II or CAT III operations, the aircraft autopilot can be used for lower altitudes, when approved by OpSpecs.</p>	Part 121, § 121.579
17	<p>Instrument Lighting. Verify that instrument lights provide enough light to make each required instrument, switch, or similar instrument, easily readable and installed so that the direct rays are shielded from flight crewmembers' eyes and that no objectionable reflections are visible to them. There must be a means of controlling the intensity of illumination unless it is shown that nondimming instrument lights are satisfactory.</p>	Part 121, §§ 121.323(d) and 121.325(c)

ITEM	FLIGHT DECK	REFERENCE
18	Pitot Heat Indication Systems. Verify that the indication system incorporates an amber light that is in clear view of a flight crewmember and that is designed to alert the flightcrew if the pitot heating system is switched “off,” or the pitot heating system is switched “on,” and any pitot tube heating element is inoperative.	Part 121, § 121.342
19	Required Powerplant Instruments. Verify the installation of approved instruments, as listed below: <ul style="list-style-type: none"> a. Fuel pressure indicator for each engine; and either an independent fuel pressure warning device for each engine, or a master warning device for all engines with a means for isolating the individual warning circuits from the master warning device. b. Fuel flow indicator for each engine not equipped with an automatic altitude mixture control. c. Fuel quantity indicator for each fuel tank to be used. d. Oil pressure indicator for each engine. e. Oil quantity indicator for each oil tank. <p style="margin-left: 40px;">NOTE: Indicator may not always be located on the flight deck.</p> <ul style="list-style-type: none"> f. Oil temperature indicator for each engine. g. Oil pressure warning means for each engine. h. Tachometer for each engine. For turbine engine-powered aircraft, the indicators must display speed rotors (i.e., N1, N2, N3) that have established limiting speeds. i. Augmentation liquid quantity indicator for each tank (if applicable). j. An approved means to ensure prompt detection of a fire in designated fire zones 	Part 91, § 91.205 Part 121, § 121.307

ITEM	FLIGHT DECK	REFERENCE
	<p>(engine or auxiliary power unit compartments for part 23 and part 25 aircraft). There must also be a means to allow the crew to check, in flight, the functioning of each fire detector electric circuit.</p> <p>k. Reverse pitch indication for each reversible propeller (if applicable).</p> <p>l. Gas Temperature (e.g., exhaust gas temperature) indicator for each turbine engine (if applicable).</p> <p>m. Engine starter indication for each turbine engine-powered part 25 aircraft (if applicable).</p> <p>n. Ice protection system indication for each turbine engine (if applicable).</p> <p>o. Fuel filter bypass indication for each turbine engine (if applicable).</p> <p>p. Oil strainer or filter warning indication for each turbine engine (if no bypass installed) to warn flightcrew of the occurrence of contamination of the strainer or filter before it reaches maximum capacity (if applicable).</p> <p>q. A means to indicate proper functioning of any heater(s) used to prevent ice clogging of fuel system components.</p> <p>r. Thrust (or directly related, e.g., N1) indicator for each turbojet or turbofan engine (if applicable).</p> <p>s. Thrust reversing indicator for each engine using a thrust-reversing device, to indicate to the flightcrew when the thrust-reversing device is in the reverse thrust position (if applicable).</p> <p>t. Rotor system unbalance indicator for part 25 turbojet-powered aircraft (if applicable).</p> <p>u. Torque indication for each turbine propeller-powered aircraft engine (if applicable).</p>	

ITEM	FLIGHT DECK	REFERENCE
	<p>v. Propeller position indication for each propeller of turbo propeller-powered aircraft (if applicable). For airplanes equipped with fluid systems (other than fuel) for thrust or power augmentation, an approved means must be provided to indicate to the flightcrew the proper functioning of that system, if applicable.</p> <p>w. For part 23 turbine engine-powered aircraft, a fuel-low level warning means for any fuel tank that should not be depleted of fuel in normal operations (if applicable).</p> <p>x. Carburetor air temperature indicator.</p> <p>y. For air-cooled engines, a cylinder head temperature indicator for each engine.</p>	
20	Takeoff Warning System. Verify the installation of a takeoff warning system. Refer to part 25, § 25.703.	Part 121, § 121.293
21	<p>Landing Gear Aural Warning Device. The following is excerpted from part 121, § 121.289:</p> <p>“Except for airplanes that comply with the requirements of Sec 25.729 of this chapter on or after January 6, 1992, verify that a landing gear aural warning device that functions continuously under the following conditions:</p> <p>a. For airplanes with an established approach wing-flap position, whenever the wing flaps are extended beyond the maximum certificated approach climb configuration position in the AFM and the landing gear is not fully extended and locked.</p> <p>b. For airplanes without an established approach-climb wing-flap position, whenever the wing flaps are extended beyond the position at which landing gear extension is normally performed and the landing gear is not fully extended and locked.”</p>	§ 121.289
22	Flight Deck Inspection. Inspect the flight deck for cleanliness, poor condition, loose/missing equipment, deterioration,	§ 121.153

ITEM	FLIGHT DECK	REFERENCE
	breakage, leakage, corrosion, proper installation, and other indications of defects. Pay particular attention to windshields, windows, paneling, flooring, controls, lighting, and wiring installations.	
23	Flight Deck Interiors/Fire Resistance. Examine seat dress cover assemblies for meeting the flammability requirements of part 25, § 25.853(a). Review documentation of flame testing. AC 25.853-1, Flammability Requirements For Aircraft Seat Cushions.	Part 121, §§ 121.215, 121.312
24	Flightcrew Emergency Exits. For airplanes in which the proximity of passenger emergency exits to the flightcrew area does not offer a convenient and readily accessible means of evacuation for the flightcrew, and for all airplanes having a passenger-seating capacity greater than 20: a. Verify that flightcrew exits are located in the flightcrew area. b. Verify that such exits are of sufficient size and are located to permit rapid evacuation by the crew. One exit must be provided on each side of the airplane, or a top hatch may be provided. Each exit must encompass an unobstructed rectangular opening of at least 19 by 20 inches unless satisfactory exit utility can be demonstrated by a typical crewmember.	Part 121, § 121.221
25	Emergency Equipment. Verify that each item of emergency and flotation equipment meet the following requirements: a. Be inspected regularly in accordance with inspection periods established in the OpSpecs to ensure its condition for continued serviceability and immediate readiness to perform its intended duty. b. Be readily accessible to the crew. c. Be clearly identified and marked to indicate its method of operation. d. When carried in a compartment or	Part 121, §§ 121.221, 121.309

ITEM	FLIGHT DECK	REFERENCE
	container, be carried in a compartment or container marked as to contents. The compartment or container, or the item itself, must be marked as to date of last inspection.	
26	Medical Kit (if located on flight deck). Refer to the requirements of Table 10-20, Fuselage Interior, Item 24. Part 121, appendix A	Part 121, § 121.803
27	Hand Fire Extinguishers for Flightcrew. Verify that at least one hand fire extinguisher is conveniently located on the flight deck for use by the flightcrew. The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used. Check for fire extinguisher security, pressure, hydrostatic test dates, and seal.	§ 121.309 AC 20-42C, Hand Fire Extinguishers for Use in Aircraft
28	Protective Breathing Equipment (PBE). The following is excerpted from part 121, § 121.337(b)(1): “Verify that the equipment will protect the flightcrew from the effects of smoke, carbon dioxide or other harmful gases, or an oxygen deficient environment caused by other than an airplane depressurization while on flight deck duty and must protect crewmembers from the above effects while combating fires on board the airplane.” The following is excerpted from part 121, § 121.337(b)(9)(i) “One PBE must be on the flight deck, except that the Administrator may authorize another location for this PBE if special circumstances exist that make compliance impractical and the proposed deviation would provide an equivalent level of safety.”	§ 121.337
29	Oxygen Equipment and Supply. a. Verify that aircraft is equipped with oxygen equipment per part 25, §§ 25.1441 to 25.1453.	Part 91, § 91.211 Part 121, §§ 121.309, 121.329, 121.333, 121.574

ITEM	FLIGHT DECK	REFERENCE
	<p>b. Oxygen/fire extinguisher pressure vessel inspections must comply with 49 CFR part 180, § 180.205, DOT, or U.S. Coast Guard requirements.</p> <p>c. Check all portable and fixed oxygen bottles and fire bottles for hydrostatic test dates.</p>	
30	<p>Seats, Berths, Safety Belts, and Harnesses. Verify that each seat at a flight deck station has a restraint system consisting of a combined safety belt and shoulder harness with a single-point release that permits the flight deck occupant, when seated with the restraint system fastened, to perform all of the necessary flight deck functions.</p>	<p>Part 91, § 91.521</p> <p>Part 121, § 121.311</p>
31	<p>Approved Flight Deck Check Procedures Checklist. Verify that approved procedures include each item necessary for flight crewmembers to check for safety before starting engines, taking off, or landing, and in engine and systems emergencies.</p>	<p>Part 121, § 121.315</p>
32	<p>Observer Seat. Verify installation, security, and condition of flight deck observer seat and all required peripheral equipment.</p>	<p>Part 121, § 121.581</p>
33	<p>Placards. Verify that manufacturer-required placards are installed. Refer to Aircraft Maintenance Manual chapter 11 for data. All placards required by either the approved AFM, the applicable operating rules, operators placard manual, or the certification basis must be installed in the airplane. Refer to: TCDS, STCs, AC 20-88, AMM.</p>	<p>Part 121, § 121.310</p>
34	<p>Windshield Wiper. Verify installation or equivalent for each pilot station.</p>	<p>Part 121, § 121.313</p>
35	<p>Pilot Compartment Doors. Verify the following requirements for a lockable door that must be installed between the pilot compartment and the passenger compartment:</p> <p>a. The emergency exit configuration must be designed so that neither crewmembers nor passengers need to use that door to reach the</p>	<p>Part 121, §§ 121.217, 121.219, 121.313</p>

ITEM	FLIGHT DECK	REFERENCE
	<p>emergency exits provided for them; and</p> <p>b. Means must be provided to enable flight crewmembers to directly enter the passenger compartment from the pilot compartment if the flight deck door becomes jammed. In any case where internal doors are equipped with louvers or other ventilating means, there must be a means convenient to the crew for closing the flow of air through the door when necessary.</p> <p>c. The following is excerpted from part 121, § 121.313(f):</p> <p>“A door between the passenger and pilot compartments (e.g., flight deck door) with a locking means to prevent passengers from opening it without the pilot’s permission except that nontransport category airplanes certificated after December 31, 1964 are not required to comply with this paragraph. For airplanes equipped with a crew rest area having separate entries from the flight deck and the passenger compartment, a door with such a locking means must be provided between the crew rest area and the passenger compartment.”</p> <p>d. The following is excerpted from part 121, § 121.313(j): “Each door must meet the requirements of Sec. 25.795(a)(1) and (2) in effect on January 15, 2002...”</p>	
36	<p>Portable Electronic Devices (PED) and Electronic Flight Bags (EFB).</p> <p>a. Verify that the certificate holder has properly determined that permitted portable electronic devices and/or electronic flight bags will not cause interference with the navigation and communication systems of the subject aircraft.</p> <p>b. Verify the software version meets the AFM/AOM and certificate holder’s requirements. Refer to AC 120-76, Guidelines for the Certification, Airworthiness, and Operational Approval of Electronic Flight</p>	Part 121, § 121.306

ITEM	FLIGHT DECK	REFERENCE
	Bag Computing Devices.	
37	Protective Fuses. If protective fuses are installed on the airplane, the certificate holder's manual must describe the number of spare fuses approved for that airplane.	§ 91.205 § 121.313 AC 25-16, Electronic Fault and Fire Prevention and Protection; AC 25.1357-1, Circuit Protective Devices
38	Crash Ax. Each transport-category airplane must be equipped with a crash ax.	§ 121.309(e)

Table 10–22, Equipment and Cargo Compartments

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	General Visual Inspection. This inspection is a visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light. This inspection may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to access the area being checked. Use normal inspection aids as required, such as inspection mirrors, etc.	49 U.S.C., § 44713 8900.1 Volume 6, Chapter 2, Section 4
1	Compartment Inspection, Electrical/Electronics (E&E). <p>a. Conduct a general visual inspection of the compartment. Check components for general installation and condition.</p> <p>b. Check for exposed electronic/electrical components, including wiring and connectors, for condition and security.</p> <p>c. Check that electrical wiring and power cables are properly grouped, bundled, routed, and secured to the component framing and airframe structure.</p> <p>d. Inspect the exposed airframe structure for general condition, corrosion, corrosion prevention application, evidence of fluid</p>	Part 121, § 121.221 8900.1 Volume 6, Chapter 2, Section 4

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	leaks and damage.	
2	<p>Compartment Inspection, Cargo, General.</p> <p>a. Inspect each compartment for general condition, cleanliness, deterioration, and security of the compartments and equipment.</p> <p>b. Inspect exposed electronic/electrical components, including wiring and connectors, for condition, security, and proper bonding.</p> <p>c. Check that exposed electrical cables and wiring are properly grouped, bundled, routed, and secured to the airframe structure (When visible).</p> <p>d. If repairs are noted verify the repair data at the certificate holder's record repository for FAA-approved data.</p> <p>e. Check that power cables are isolated from flammable fluid lines or shrouded by a nonmetallic flexible conduit in addition to the cable insulation when visible.</p> <p>f. Check that all controls, wiring, hydraulic and fuel lines, equipment or other accessories, are adequately shielded, isolated or otherwise protected, to prevent damage or fire by possible movement of the cargo or baggage.</p> <p>g. Pay particular attention to cargo and container handling systems, either original equipment or by STC. Check for conformity with that data.</p>	<p>Part 121, §§ 121.221, 121.314</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p>
3	<p>Isolation. Check that internal doors are equipped with louvers or other ventilating means. There must be a means convenient to the crew for closing the flow of air when necessary.</p>	<p>Part 121, § 121.217</p> <p>8900.1 Volume 6, Chapter 2, Section 4</p>
4	<p>Required Crew Emergency Exists.</p> <p>a. Check that the crew has access to emergency exits under all cargo loading conditions. These emergency exits cannot be located within the "E" cargo compartment.</p> <p>b. Check the designation and markings of</p>	<p>8900.1 Volume 6, Chapter 2, Section 4</p>

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	the emergency exit(s).	
5	<p>Cargo Restraint System. Check that the existing cargo restraint system installation (restrain system, pallets and nets) is properly identified, certificated, and complies with manufacturer's specifications; and has a maintenance program. Authorized unit load devices (ULD) for a particular aircraft configuration should be noted in the operator's manuals.</p>	<p>Part 121, §§ 121.221, 121.285 AC 25-18 8900.1 Volume 6, Chapter 2, Section 4</p>
6	<p>Cargo Compartments. Check cargo compartments for the following: Each compartment must be designed so that, when used for storing cargo or baggage, it meets the following requirements as stated in § 121.221(a)(1) through (a)(4):</p> <p>a. No compartment may include controls, wiring, lines, equipment, or accessories that would upon damage or failure, affect the safe operation of the airplane unless the item is adequately shielded, isolated, or otherwise protected so that it cannot be damaged by movement of cargo in the compartment and so that damage to or failure of the item would not create a fire hazard in the compartment.</p> <p>b. Cargo or baggage may not interfere with the functioning of the fire-protective features of the compartment.</p> <p>c. Materials used in the construction of the compartments, including tie-down equipment, must be at least flame resistant. The following is excerpted from § 121.312(e):</p> <p>Thermal/acoustic insulation materials. For transport category airplanes type certificated after January 1, 1958:</p> <p>(1) For airplanes manufactured before September 2, 2005, when thermal/acoustic insulation is installed in the fuselage as replacements after September 2, 2005, the insulation must meet the flame propagation requirements of Sec. 25.856 of this chapter,</p>	<p>§§ 121.221, 121.312</p>

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	<p>effective September 2, 2003, if it is:</p> <ul style="list-style-type: none"> (i) Of a blanket construction or (ii) Installed around air ducting. <p>(2) For airplanes manufactured after September 2, 2005, thermal/acoustic insulation materials installed in the fuselage must meet the flame propagation requirements of Sec. 25.856 of this chapter, effective September 2, 2003.</p> <p>d. Each compartment must include provisions for safeguarding against fires according to the classifications set forth in paragraphs (b) through (f) of this section.</p>	
7	<p>Required Crew Emergency Exits.</p> <ul style="list-style-type: none"> a. Check that the crew has access to emergency exits under all cargo loading conditions. These emergency exits cannot be located within the “E” cargo compartment. b. Check the designation and markings of the emergency exit(s). c. Check that each crew emergency exit is a movable door or hatch in the external walls of the fuselage. d. On aircraft with two flight deck windows that cannot be opened from the outside, the most forward left main (L1) fuselage door is designated as the required emergency exit. e. Check that the path from the flight deck to the designated emergency exit is free from any obstacles and properly marked. f. Verify compliance with the applicable references. <p>NOTE: Depending on the TC or STC, marking and designation of the emergency exist will vary. Some aircraft</p>	Part 121, §§ 121.221, 121.223

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	<p>have designated the flight deck windows as the emergency exit.</p> <p>NOTE: On certain aircraft an overhead hatch may be provided as an emergency exit.</p>	
8	<p>Major Alterations of Aircraft Modified to Cargo Freighters. (including palletized restrain systems, cargo doors, etc).</p> <p>a. When the operator's aircraft has been modified to a cargo freighter in accordance with an STC, perform a conformity evaluation with the FAA-approved modification data.</p> <p>b. When other than the STC holder's parts and components are used, verify compliance with approved data obtained from the certificate holder's records repository.</p>	<p>§ 91.9</p> <p>AC 25-18</p> <p>AC 120-77</p> <p>8900.1 Volume 4, Chapter 9, Section 1, Perform Field Approval of Major Repairs and Major Alterations</p> <p>8900.1 Volume 6, Chapter 2, Section 5</p>
9	<p>Baggage and Cargo Compartment Restraint System.</p> <p>a. Verify the restraint system is installed per the approved or accepted data of the OEM or STC holder.</p> <p>b. Check that the restraint system meets TSO-C90, Cargo Pallets, Nets, and Containers or other approved means as required.</p> <p>c. Using certificate holder's records repository, verify that the certificate holder has a maintenance program for its system.</p> <p>d. Check the existing aircraft baggage and cargo restraint system installation (restrain system, pallets, and nets) for general condition and security. Ensure the aircraft baggage and cargo restraint system are properly identified to their weight or load limits, are certificated, and comply with the manufacturer's specifications. Verify they have a maintenance program.</p> <p>e. Check that the nonmetallic parts of the</p>	<p>Part 121, §§ 121.221, 121.285, 121.287</p>

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	<p>restraint system comply with the flammability requirements.</p> <p>f. Verify at the certificate holder's record repository that authorized ULDs for a particular aircraft configuration are noted in the operator's manuals.</p> <p>g. Certain noncertified ULDs are allowed on particular aircraft; however, verify at the certificate holder's records repository that the operator has a maintenance program that prevents these ULDs from becoming a hazard to the aircraft. Refer to AC 25-18.</p>	
10	<p>Cargo Barrier.</p> <p>a. Regardless whether the main cabin is used for cargo-only or as a "combi," it must be equipped with a forward 9.0g barrier; either a solid bulkhead or net, in compliance with § 121.285, § 25.561 or CAR 4b.269.</p> <p>b. If the aircraft has been converted from a passenger configuration to a cargo-only or a "combi" through an STC, refer to AC 25-18 for details and verify the records for approved data. Perform the conformity review with this data.</p> <p>c. If a solid 9.0g bulkhead is installed, check for general condition and conformity with approved data at the certificate holder's records repository.</p> <p>d. If a 9.0g barrier net is installed, check it for general condition, security, fraying, hardware integrity, and airframe attachment hardware.</p> <p>e. Check for the presence of an FAA/Part Manufacturer Approval tag, and TSO tag if applicable.</p>	§§ 121.221, 121.285
11	<p>Class A Cargo Compartments. Check all Class A cargo and baggage compartments:</p> <p>a. Ensure Class A compartments are readily discernible to a member of the crew while at his or her station if a fire is in that</p>	§§ 121.221, 121.285, 121.309

ITEM	EQUIPMENT AND CARGO COMPARTMENTS	REFERENCE
	<p>compartment.</p> <p>b. Ensure that all parts of the compartment are easily accessible in flight.</p> <p>c. Verify there are hand fire extinguishers for the crew, passenger, cargo, and galley compartments. Hand fire extinguishers of an approved type must be provided for use in crew, passenger, cargo, and galley compartments in accordance with the following: At least two of the required hand fire extinguishers installed in the passenger-carrying airplanes must contain Halon 1211 (bromochloroflouromethane) or equivalent as the extinguishing agent. At least one hand fire extinguisher in the passenger compartment must contain Halon 1211 or equivalent.</p> <p>NOTE: The compartment must meet all applicable parts of § 25.853 or CAR 4b.381.</p>	
12	<p>Class B Baggage and Cargo Compartments. Check all Class B. Cargo and baggage compartments:</p> <p>a. Ensure that sufficient access is available in flight to enable a crewmember to effectively reach any part of the compartment with the contents of a hand held fire extinguisher.</p> <p>b. When the access provisions are being used, ensure no hazardous quantity of smoke, flames, or extinguishing agent, will enter any compartment occupied by the crew or passengers.</p> <p>NOTE: Use the extinguishing agent that is most suitable for the kinds of fires that are likely to occur in the compartment.</p> <p>c. Verify there is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station (refer to part 25, § 25.858).</p>	§§ 121.221, 121.285

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	<p>d. It must be lined with fire-resistant material, except that additional service lining of flame-resistant material may be used.</p>	
13	<p>Class C Cargo Compartments. Identify each Class C compartment and verify with the applicable 14 CFR reference.</p> <p>Class C cargo and baggage compartments are classified in the “C” category if they do not conform with the requirements for the “A”, “B”, “D”, or “E” categories. The following are criteria for Class C:</p> <p>a. There is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station.</p> <p>b. There is an approved built-in fire extinguishing or suppression system controllable from the cockpit.</p> <p>c. There are means to exclude hazardous quantities of smoke, flames, or extinguishing agent from any compartment occupied by the crew or passengers.</p> <p>There are means to control ventilation and drafts within the compartment so that the extinguishing agent used can control any fire that may start within the compartment. Refer to part 25, §§ 25.855 and 25.857.</p>	Part 121, §§ 121.221, 121.223, 121.312, 121.314, 121.367
14	<p>Class D Cargo Compartments. All Class D cargo compartments must have been converted or retrofitted to meet the standards of a Class C or Class E compartment on or before March 19, 2001.</p> <p>NOTE: As a result of the 1996 Valuejet accident, the United States part 121, § 121.314(c) requires that after March 19, 2001, each Class D cargo compartment must meet the requirements of part 25, § 25.857(c) and § 25.858 for Class C cargo compartments. All cargo operation aircraft may</p>	§ 121.314

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	have the Class D compartments meet the requirements of part 25, § 25.857(e) for Class E.	
15	<p>Class E Cargo Compartments. Verify a Class E cargo compartment is used for the carriage of cargo only and the cabin area is classified as E. The following are criteria for Class E:</p> <ul style="list-style-type: none"> a. There is a separate approved smoke or fire detector system to give warning at the pilot or flight engineer station. b. There are means to shut off the ventilating airflow to, or within, the compartment, and the controls for these means are accessible to the flightcrew in the crew compartment. c. There are means to exclude hazardous quantities of smoke, flames, or noxious gases, from the flightcrew compartment. d. The required crew emergency exits are accessible under any cargo loading condition. 	Part 121, §§ 121.219, 121.221, 121.223, 121.287, 121.309, 121.314

RESERVED. Paragraphs 10-466 through 10-479.